

Personalized Messaging Delivers Better Care Quality and Lower Costs







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Overview



Health plans are in a state of rapid evolution, facing unprecedented financial challenges in the personal health insurance exchange market while being incentivized to deliver measurably higher care quality through programs like Medicare Star Ratings. To effectively take advantage of the reform driven coverage expansion opportunities, plans need to quickly learn how best to manage these new populations in a proactive and impactful way. The ongoing discussions around "member engagement" and price transparency need to move from just "talk" to a credible "walk" when it comes to health plans influencing their members to choose healthcare resources that increase the quality of care while reducing the overall cost of care. If health plans and care providers (e.g., physicians, hospitals, extended care facilities, etc.) expect to become truly "patient-centered," building bigger data warehouses and collecting more EMR data will return little value until a member hears directly from their provider via messaging on the value of adherence to their treatment plans.

According to the Milliman Medical Index, the cost of healthcare for a typical American family of four has risen from \$24,671 in 2015 to \$28,256 in 2020, with the number anticipated to increase 8.4% in the next year. Cost pressures are mounting, and health plans are increasingly shifting costs (e.g., high deductibles), while reducing care options (e.g., narrow networks, restrictive formularies) to their covered members. Engaging members with personalized messaging and in ways that clearly show "What's in it for them" is essential for any company managing health risks. Members will gravitate toward health plans and PBMs that invest in nimble analytics platforms and messaging applications that accommodate members' preferred message delivery channels (e.g., text, email, portal, print), for their health care benefits.

"According to the Milliman Medical Index, the cost of healthcare for a typical American family of four is anticipated to exceed \$30,000 in 2022."



Delivering personalized messaging increases adherence to evidence-based care and promotes overall better patient health outcomes while reducing commercial, Medicare and Medicaid costs. A December 2019 paper published in the journal Medicine studied text message reminders in a population with coronary heart disease. The study showed that reminders increased medication adherence by 2.85 times the levels of patients in a control group who did not receive text reminders "with 97 percent of American adults owning a mobile phone", a health plan or provider's ability to deliver personalized messaging to their members or patients through mobile messaging, combined with other messaging channels, offers all stakeholders in the healthcare industry the best approach for reducing costs and improving quality.



Health Care Industry Shift: Care Delivery Process

The health care delivery system of the past was simpler and more intimate than the one patients are facing in the "accountable care" era. Previously, if you were sick, you would call your family doctor for an appointment, and the doctor would see you. You might get a prescription and you would fill it at the pharmacy where you would probably pay a fair price at the point of sale. The subsequent fee for your physician's office visit would be absorbed by your employer-sponsored health insurance benefits, which again, had a small financial obligation by the patient in the form of a "co-insurance" payment that might have to be paid months after the visit.



Today, the health care delivery process incorporates myriad rules and regulations, with a wide variety of care access steps and requirements that often lead to confusion for both patients and providers. A fundamental shift in health care process management from volume-based care^{IV} to value-based care^V has led to increased requirements for providers to be proactive in their responsibilities for achieving better health for their patients through variations of "capitation" and "bundled payment" population health arrangements. In addition, with health insurance exchange mandated coverage requirements, the patient's burden of higher deductibles, narrower provider networks (which might not include their family doctor), and multi-tiered pharmacy and medical benefits combine to create care access and benefit utilization confusion, which can often lead to both lower patient satisfaction and reluctance to adhere to treatment recommendations by their providers.

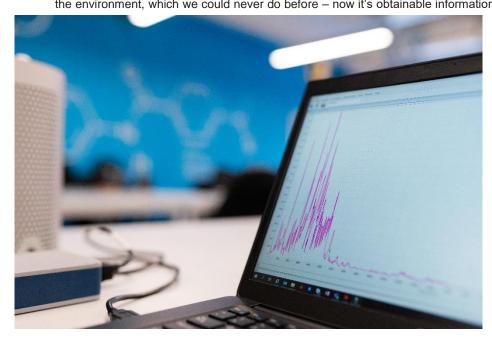
Currently, the United States health care system is the costliest in the world, accounting for almost 19.7 percent of the GNP, and growing at a rate of almost 10% per year. VI Attempting to confront spiraling health care costs, the Institute for Healthcare Improvement (IHI) created an initiative designed to coordinate better care for individuals, better health for populations, and lowered per capita costs for all involved. Known as the "Triple Aim," the goal of the initiative was to assist members and health care organizations in finding cost-effective solutions for driving more positive experiences, improving the health of populations on a global level, and reducing per capita costs of healthcare. Among the tactics introduced to support the Triple Aim was the move towards a more coordinated care model that was characterized as being "patient-centered," with various supporting health care service providers surrounding a patient's care needs and supposedly having networks that coordinated the communications between all involved in the patient care.

The potential for patient care coordination to help drive positive patient outcomes has been identified by the Institute of Medicine as an important strategy to improve the overall effectiveness of the American health care system. Vii Payers and providers are embracing and investing in the technologies that truly coordinate communications, which should consider a patient's communication channel preference, contain message content "tailored" to their unique needs, and be delivered on a timely basis to the appropriate patient providers and care advocates who surround the patient. A passenger on an airline can get a text about a gate change or delayed flight situation with more precision and timeliness than a patient facing a delay in their office appointment schedule or the timely results of a lab test that is critical to their health. This must change if health care is going to be effective in better patient engagement.



Analytic Opportunities

According to Eric Topol MD, and executive vice president of the Scripps Research Institute, we now have tools and information that we have never had before. We can digitize and quantify almost every aspect of human beings. Just as Google maps have a satellite view, a traffic view, a street view – we can create a "Google medical map" of a human being from external features to anatomy (by scans) to physiology (by sensors), to DNA, RNA, and chemical composition. "We can quantify the environment, which we could never do before – now it's obtainable information," says Topol." Viii Analytic initiatives truly hold the potential for extreme value in



health care management. From predictive analytics to pharmacogenomics to comprehensive analysis of a health plan member's preferences and past experiences, Big Data promises to help plans find the path to optimized care. However, instead of huddling in wait for the more epic and ambitious initiatives to build momentum and take shape, insurers, PBMs, and ACOs should remember that they already have Big Data at their fingertips. Today, they can leverage existing eligibility, claims, formulary, and patient-provided data to personalize messaging to encourage behavior change towards the goals of improving patient care quality and lower healthcare costs.

A June 2020 report from McKinsey studies healthcare ecosystems and leveraging of health care data sets. The report states, "Healthcare services and technology players (payment integrity, revenue cycle management, population health, clinical decision support) currently play a critical role in converting underlying data to actionable insights for a variety of customers." ^{ix.} Again, transformation can occur one patient at a time. A messaging platform should be able to consume a patient's recent lab test result and trigger an outbound secure email message to the member that not only advises them of the lab test result but suggests a preferred next step in the health care support process.

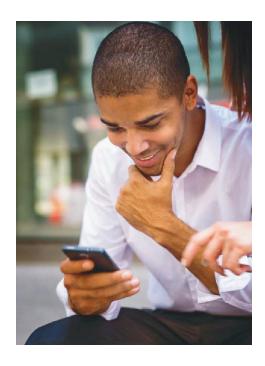
As mentioned by the Institute for Health Technology Transformation, "Health data is diverse and distributed in hard-to-penetrate silos owned by a multitude of stakeholders. To complicate matters, each stakeholder has different interests and business incentives while still being closely intertwined." Big Data efforts will attempt to integrate these disparate data sets, and if accessible by an analytics and messaging platform, plans and PBMs could create rules to identify the patient populations who would benefit the most from a personalized message sent at the right time through the patient's preferred communication.

For health plans and providers, understanding the what, when, and how of personalized messaging delivery are the keys to more compelling engagement with patients. Accessing medical and pharmacy claims data, building rules, and completing patient segmentation analytics based on quality-of-care measures are fundamental steps toward building patient messaging campaigns, which can improve a patient's health and deliver cost savings for both the patient and their health plan.



Personalized Messaging Delivers Cost Savings

Creating a personalized healthcare messaging program for patients via text messaging, email, portals, and other outreach programs should begin with determining and accommodating the patient's preferred method of communication. With confidence that a health plan or provider knows how to reach the patient, the following are suggested areas that could make the communication effort more personalized:



Customized Content: Health plans and providers should consider content for messaging that reflects the language preference of the member, health care savings topics that are determined using the patient's current benefits and year-to-date claims experience and spending detail, and health improvement tips that offer social network site support that are of value to the patient, which can be gathered throughout the year from agencies who offer access to patient website preference data from credible sources. Simply tying a coupon offer for a free screening to a healthcare services location that is close to the patient suggests to the patient that the health plan or provider understands the patient's interest in convenience.

Messaging Campaigns: Reaching out to patients should not be considered a "one and done" process. Successful campaign strategies will use multiple touch points, varying frequencies, and time of day tactics to achieve the goal of embracing the patient with the message. Patients with diabetes don't have to be continually told they have diabetes with generic messaging but would appreciate well-timed offers for glucose test supplies discounts or free deliveries at times consistent with their purchasing patterns, including "push" messages from pharmacy networks at times when their smart phone is located proximately to a retail store or healthcare service location they have frequented before for managing their chronic condition. "Trigger messages" can be automatically sent for high-impact rapid messaging, when claims for particular drugs are received by the adjudication system or when other pre-defined criteria are met. Well-timed medication refill reminders via text messaging sent within both five and two days remaining on a current prescription supply offers the patient a friendly reminder to take action.

Integrating patient and provider messaging into the overall healthcare support process can offer cost savings for chronic conditions. A 2018 study published in BMJ showed that targeted text messages to diabetic patients over a nine-month period showed substantially higher reductions in HbA1c levels than in random control group. Specifically, the text message group lowered HbA1c more than double the reduction seen in controls^{Xi}.

And it is not just about long-term outcomes. Active engagement from providers to patients across communication channels can also create near-term cost savings. A University of Chicago Medicine text messaging program showed a "significant decrease in health care costs compared to the pre-test period. The total cost of care declined \$812 per participant, reflecting a savings of \$1,332 in inpatient, outpatient, and emergency department visits, offset by a \$520 increase in drug costs. Seventy-three percent of participants said they were satisfied with the program, with 88 percent pointing to interaction with a health professional as an important factor in their engagement." Xii



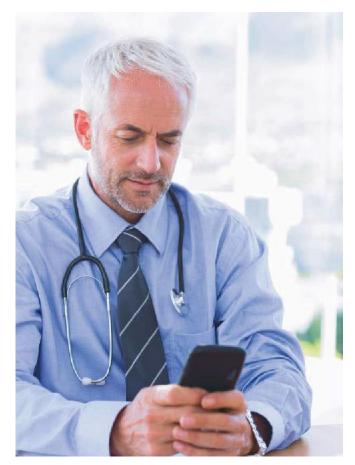
Building Trust with Patient

According to a recent Deloitte publication, "While the US health care system has been moving toward a more consumer-focused experience, progress has been slow. In some cases, regulatory barriers have made it difficult to create a transparent, consumer-friendly, and highly personalized experience. "Ille The pandemic has made the situation worse, reducing engagement and overall mental and physical wellness. Out of fear and uncertainty, many consumers have refrained from maintenance care and postponed elective procedures. Misinformation, confusion, and other factors continue to impact patient care, as they, in fits and starts, emerge from this COVID sequestration.

In Deloitte's survey of respondents, "Eighty-two percent...said they are experiencing anxiety or fear, 77 percent feel uncertainty or a lack of control, and 75 percent feel loneliness or a sense of isolation." Deloitte further states, "As consumers begin to re-engage with the health care system, hospitals, health systems, and health plans have an opportunity to remove anxiety and build trust with consumers. The DNA of trust in health care is made up of three core components: Hope, Control, and Connection." By communicating with patients in a personalized, targeted, and constructive way, health plans can address all three of these components.

A 2021 McKinsey article supports these themes, specifically with respect to "how patients expect to do business with health care companies" going forward. McKinsey says, "To support consumers in those changes, the healthcare ecosystem would likely benefit from accelerating the shift toward making care personal and convenient, using omnichannel methods to reach consumers when and how they want, and improving transparency to support decision making. "Iv

With the increase in healthcare communication channels (e.g., social media, texting, GPS/location-based reminders, and push messaging), it can be a challenge for insurers, patients, and health care providers to determine the best strategy for effective member engagement across these communication channels. Consumer expectations for information delivery through their preferred communication channels will influence their overall experience and satisfaction with their healthcare providers and plans.





Technology-Driven Savings are Accelerating

US consumers use of technology tools to measure fitness and track health-improvement goals has jumped from 17% in 2013 to 42% in 2020, according to a Deloitte report "Among individuals who track their health, 77% say it changes their behavior at least moderately. Younger generations (Gen Z and millennials) are much more likely to say it changes their behavior." In discussing the implications of this shift toward technology, Deloitte states, "With health care consumers now more willing to adopt tools and share data...new digital tools can play an important role in the future of care. When organizations deploy them optimally, these tools have the potential to increase consumer satisfaction, improve medication adherence, and help consumers track and monitor their health (including signs and symptoms that may alert them to the need for care)."

According to a recent McKinsey paper, "health insurers are beginning to leverage the digital, advanced analytics, and personalization capabilities developed and refined in other industries to create new, more effective digital member support tools and to scale the member engagement solutions already available. Collectively, these capabilities and tools, when applied broadly, are starting to improve clinical outcomes, enhance member experience, and reduce near-term medical costs." In fact, the authors reference the potential for \$175 billion to \$220 billion in annual medical cost reductions from digitally enabled capabilities.^{XVI}

The use of mobile messaging continues to grow across all demographics as >97% of Americans carry mobile phones, 85% of them smart phones. XVII Of course, text messaging should not be considered the only way to reach patients. An integrated personalized messaging plan that conforms to individual preferences still needs to integrate the following communication channels:



- Text messaging
- Email messaging
- IVR / phone calling
- Personalized postal mail
- Social media outlets specific to patient conditions
- Secure web-portals





Personalized Messaging Leads to Better Quality and to Reduced Costs



In 2020, health care spending accounted for 19.7% of the US GDP, almost 10% greater than the prior year, and representing about \$12,530 per American. XVIII As more personalized and current messaging between customers, health care providers, and insurers grows, the increase in medication adherence alone could potentially save billions in health care costs. As reported by PhRMA, XIX improved medication adherence could drive cost of care savings by:

- Preventing Hospitalizations: Poor medication adherence is associated with increased hospitalizations, nursing home admissions, and unnecessary physician visits. For instance, research demonstrates that patients who did not consistently take their diabetes medicine were 2.5 times more likely to be hospitalized than patients who took their medicine as directed.
- Preventing Disease: Non-adherent patients were 7 percent, 13 percent, and 42 percent
 more likely to develop coronary heart disease, cerebrovascular disease, and chronic heart failure,
 respectively, over three years than were patients who took anti-hypertension medicine as
 directed.
- Preventing Adverse Events: Providing counseling to patients to clarify their medication regimen following hospital discharge can dramatically reduce the likelihood of adverse drug events.



Better Communication Contributes to Higher Medicare Star Ratings

Medicare uses a five-star rating system XX — **Medicare Star Ratings** — to measure the performance of Medicare Advantage and prescription drug (Part D) plans. It scores plans in several categories, including customer service and quality of care, with five stars as the highest and one star the lowest. This rating system enables Medicare patients to compare quality performance for selected quality measures across all Medicare health plans.





Health plans are graded on how they perform in five categories

- Staying healthy (screenings, tests, and vaccines)
- Managing chronic conditions
- Plan responsiveness and care
- Member complaints (problems getting service, choosing to leave the plan)
- Health plan customer service

Medicare Part D plans are rated on how they perform in four categories

- Drug plan customer service
- Member complaints (problems getting service, choosing to leave the plan)
- Member experience with drug plan
- Drug pricing and patient safety

Improvements in a plan's Medicare Star Ratings will result in higher bonus payments for the plan, which can total multiple millions of dollars^{XXi} easily justifying the commitment to building better messaging applications and platforms. Health plan investments in care-gap rules engines, daily analytics to identify medication savings opportunities and medication adherence alerts, and a message delivery process for sending messages directly to both patients and providers will lead to measurable quality of care improvements and cost of care reductions.



Conclusion

The evolving healthcare delivery system and increasing accountability for lower costs and improved care quality places the burden on payers and providers to communicate more efficiently and more persuasively with their members and patients. Personalized messaging through patient portals, mobile messaging and through a member's preferred communication channels is an essential component of the healthcare delivery process. The cost for integrating clinically accurate and personalized messaging communication platforms into a health plan's current technology platform could be offset by cost of care savings and quality of care improvements in specific areas:



- · Increased medication adherence to reduce hospitalization and reduce chronic condition costs
- · Better in-network hospital, physician, and pharmacy utilization to achieve contracted discounts
- Increased member satisfaction and plan loyalty to reduce the costs of patient acquisition
- Improved quality of care metrics, leading to higher Star Rating bonuses for qualified plans

Effective messaging applications and platforms help patients and providers collaborate in the healthcare decision and delivery process, which enables the healthcare industry to improve the quality of and satisfaction with care service and reduce the costs of care as patients become more informed consumers.

Questions to consider in preparation for implementing personalized messaging applications and platforms

As healthcare providers, PBMs, and insurers look to drive better care quality and lower costs through member engagement programs, the following questions should be asked while evaluating messaging communication applications and platforms:

- a. Are clinical patient care analytics a component of the member communication application/platform to properly identify the current needs of a patient?
- b. Does the messaging application/platform offer the ability to rapidly create and verify patient cohorts targeted for messaging and to document the intended patient cohorts for adherence and audit requirements?
- c. Can the messaging application/platform customize both the message and content, message style sheet, and the communication channel preference for each selected patient who will receive a message from the plan, provider, or PBM?
- d. Are there ways to identify and monitor messaging campaigns and to manage the frequency of messaging efforts to prevent message "fatigue"?
- e. Is message delivery reporting available to analyze results by electronic channel, and for outcomes reporting, can the message be linked to subsequent claims-based analyses (e.g., medication refills, well care visits, in network provider use, etc.) to measure the effectiveness of each messaging campaign?
- f. Does the messaging application/platform offer enterprise-wide access for clinical rule authoring and analytics by line of business and by group account?



About RxEOB



RxEOB assists health plans, PBMs and their patients with software applications and services that surface specific opportunities to reduce costs and improve care quality. By developing and implementing pharmacy benefit analytics, member portals, mobile applications, and member/provider messaging platforms, RxEOB helps millions of patients become more informed healthcare consumers, which leads to better population health and reduces overall healthcare costs.

For more information on how RxEOB can help reduce your overall health care costs, please visit www.rxeob.com, email info@rxeob.com or call 804-643-1540.

- http://us.milliman.com/MMI/
- ^{II} Zhao, Ya-Yun MDa; Dang, Fang-Ping MDb; Zhai, Tian-Tian MDb; Li, Hui-Ju BDb,*; Wang, Rui-Juan MDb; Ren, Jing-Jie MDb The effect of text message reminders on medication adherence among patients with coronary heart disease, Medicine: December 2019 Volume 98 Issue 52 p e18353 doi: 10.1097/MD.0000000000018353
- https://www.pewresearch.org/internet/fact-sheet/mobile/
- https://www.healthcatalyst.com/hospital-transitioning-fee-for-service-value-based-reimbursements
- https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/Value-Based-Programs
- vi https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical
- http://www.ihi.org/Topics/TripleAim/Pages/default.aspx
- https://www.sas.com/en_us/insights/articles/big-data/big-data-in-healthcare.html
- https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/the-next-wave-of-healthcare-innovation-the-evolution-of-ecosystems
- X http://ihealthtran.com/big-data-in-healthcare
- xi https://www.bmj.com/content/361/bmj.k1959
- https://www.uchicagomedicine.org/forefront/research-and-discoveries-articles
- https://www2.deloitte.com/us/en/blog/health-care-blog/2020/will-consumers-trust-health-care-organizations-after-covid19.html
- https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/how-covid-19-has-changed-the-way-us-consumers-think-about-healthcare
- ** https://www2.deloitte.com/us/en/insights/industry/health-care/consumer-health-trends.html://www2.deloitte.com/us/en/pages/life-sciences-and-health-care/articles/health-care-consumer-engagement.html
- xvi https://healthcare.mckinsey.com/next-generation-member-engagement-during-care-journey/
- https://www.pewresearch.org/internet/fact-sheet/mobile/





- wiii https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical
- http://phrma-docs.phrma.org/sites/default/files/pdf/PhRMA_Improving%20Medication%20Adherence_Issue%20Brief.pdf
- https://www.cms.gov/newsroom/press-releases/cms-releases-2022-medicare-advantage-and-part-d-star-ratings-help-medicare-beneficiaries-compare
- https://www.kff.org/medicare/issue-brief/medicare-advantage-in-2021-star-ratings-and-bonuses/