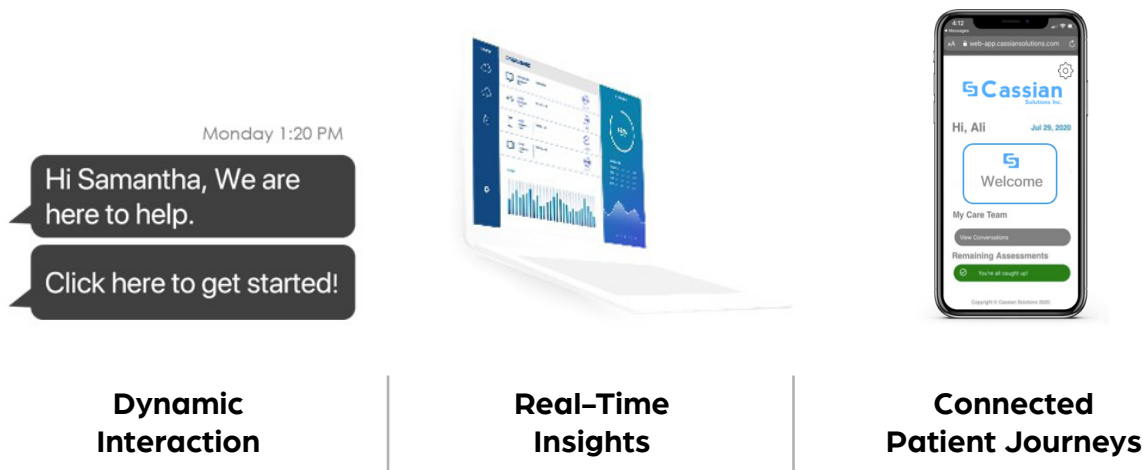




A Pharma Guide To Precision Patient Engagement



Digital patient engagement is often overlooked by pharmaceutical manufacturers despite proven commercial results. CassianRx drives better patient engagement and outcomes through our **Precision Patient Engagement program**.

Core Concepts:

- The investment case for digital engagement systems is proven
- Patient's desire for effective engagement from Pharma
- Comparison of existing engagement systems
- Commercial benefits from embedded data and analytics
- Deploying a precision engagement program for your brand

A Pharma Guide To Precision Patient Engagement

Introduction: Digital patient engagement should be considered by commercial product launch teams to increase sales through improved adherence, persistence, and patient outcomes. CassianRx is advancing patient engagement for pharmaceutical manufacturers by delivering the first precision patient engagement system. The system provides digital engagement for patients and pharmaceutical manufacturers by combining dynamic patient interaction, real-time insights, and connected patient journeys. The “Precision” aspect of the system refers to the personal tailoring that the system performs to provide the best engagement for each patient. The following sections provide compelling evidence for precision patient engagement system by comparing the use of current digital engagement systems that apply best in class tactics and strategies as a method of improving prescription efficiency resulting in better outcomes. The outcomes evaluated include increasing pharmaceutical sales, data insight generation, patient outcomes, and satisfaction.

The investment case: Before making the case for improving adherence and persistence specifically, we revisit the benefits of investing in digital engagement systems. Let us start by reviewing proven results for digital engagement systems for sales teams. In an analysis conducted by McKinsey regarding the Digital Quotient Dataset by Capital IQ, companies employing higher digital quotients saw dramatic positive increases from augmented digital engagement with their clients. Specifically, groups empowered with the highest digital involvement enjoyed a 17% 5-year revenue CAGR, relative to 8% and 6% vs digital laggards.¹

Is improving adherence and persistence a worthy investment? If one assumes the business challenges of embedding an adherence and persistence program can be overcome (as we will detail further), one must first decide if even marginal improvements in adherence and persistence as supported by data collection are worth pursuing. Figure 1 represents the adherence and persistence of a given pharmaceutical, with an average adherence of 50% by month 8 of treatment. Interventions that address only adherence or persistence would have to increase by 10% or 1.5 months respectively if an increase in sales of 20% was desired. If an intervention were to marginally improve both adherence and persistence,

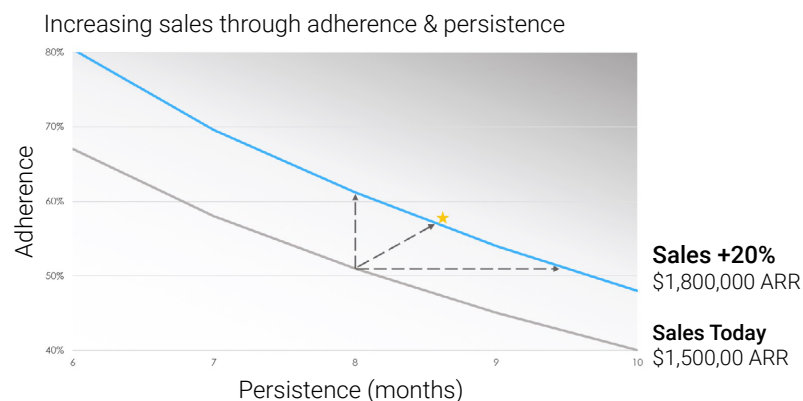
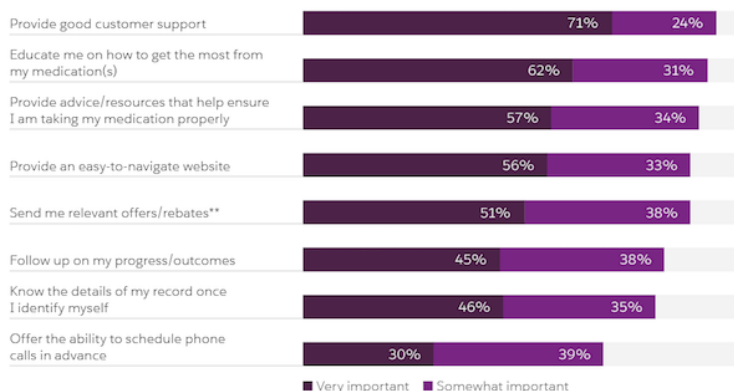


Figure 1: Marginal improvements in adherence and persistence offer significant upsides in product sales.

by 6% and 0.5 months respectively, the overall sales of the pharmaceutical would indeed increase by 20%.² As countless interventions have already determined, these outcomes can be accomplished, and significant benefits realized when the cost of patient acquisition is factored into consideration.

Is personalized engagement important to our patients? 2015 marked a turning point when more information was requested by patients over mobile devices than computers and tablets. Since then, information and engagement moved increasingly from patients' desktops to the smart phones. Similarly, health topics became the #1 search category on mobile devices, out pacing both travel and finance.¹ The desire of patients to be involved

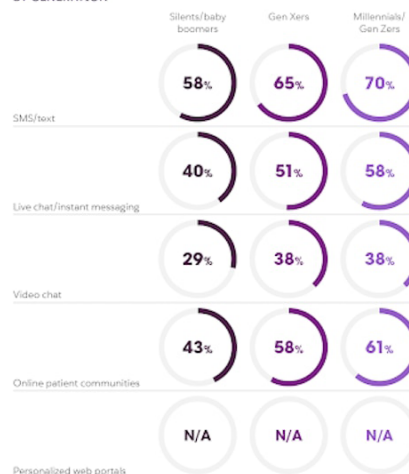
Consumers Who Say It's Important for Pharmaceutical Companies to Do the Following



Source: "Connected Healthcare Consumer," Salesforce Research, 2019.
 Base: Have been prescribed a medication by a provider within the past five years.
 ** Base: Consumers who live in the United States.

Figure 2: Consumer demand for pharmaceutical services

CONSUMERS WHO SAY IT'S IMPORTANT TO OFFER THE FOLLOWING, BY GENERATION



Source: "Connected Healthcare Consumer," Salesforce Research, 2019.
 Base: Have been prescribed a medication by a provider in the past five years.

Figure 3: Generational willingness to engage by modality.

in their health information, learning and decisions is strong and has increased during the COVID pandemic. It has also been demonstrated that consumers expect similar superior customer experiences from pharmaceutical companies. Customers want the same ease of use that they get from digital leaders like Amazon or Facebook. In a study conducted by Salesforce in 2019 surveying consumers on the responsibilities of pharmaceutical companies, the desire for engagement was overwhelming as detailed in Figure 2. With demand ranging from strong interest in customer support (72%), education (62%), and following up on progress and outcomes (45%), the desire for patients to be continuously engaged is clear. Without addressing how patients would like to be engaged, it would be hard to understand how to apply these insights to best serve our patients. Figure 3 is similarly provided by Salesforce which looks at generational interests in engagement modality, as organized by preferred medium of engagement. Importantly, this overturns another commonly held concern that elder patients are unwilling to engage in online methods of communication. Although we have seen a massive surge in mobile adoption due to the pandemic, the trend and supporting data are clearly pointing to long-term increases. Of note, 58% of seniors believe it is important to be engaged via texts (SMS), with 65% and 70% of Gen Xers and Millennials following suite.³

Lessons from patient engagement systems today: With evidence demonstrating strong patient demand for increased services, and clear indications of desired communication channels, many pharmaceutical companies have deployed various patient engagement systems of their own. These systems provide varying degrees of personalization, modules, consumer focuses, and the like. An example of systems that go above and beyond include the GPS program offered by Vertex Pharmaceuticals. Items included in this program include monthly fill reminders, check-in calls from a patient support specialists' Educational resources, Seasonal messages, and video blog posts.⁴ A similar service is offered by Abbvie through myAbbvie, including nurse ambassadors, messages, education, and the like. Similarly, countless programs offer direct access to licensed healthcare professionals.⁵ Most commonly, these licensed individuals are housed at the Hub or specialty pharmacy. As the aforementioned programs are undoubtedly leaders in patient support, the question remains, is this model available to most pharmaceutical manufacturers? How do pharmaceutical manufacturers measure the success of such programs?

As the common expression in marketing goes: "I know half of my budget is wasted. I just don't know what half." In many ways, patient engagement systems have historically fallen victim to this relationship as well. However, as the CEO of Acorda describes his relationship with digital: "We have much better ways of tracking the efficiency and effectiveness of the different concepts that we try online. And we've actually extended that into other areas of the company."⁶ This describes a fundamental component of a success of a patient engagement program. The lessons learned from the system must benefit the patients themselves, but also provide the specific level of data at the required granularity to positively impact the performance of your business.

Embedding data and analytics transforms patient engagement: The patient engagement systems typically offered by pharmaceutical companies provide the most essential services requested by patients and have the intentional goal of improving refills. Since the goal for each patient is improved health, we should also consider each patient touchpoint to be individual investments to achieving that goal through increased measurable outcomes. When each patient interaction has a measured outcome, the generated insights can benefit field sales, medical affairs, and other aspects of the business including revenue forecasts. However obvious this may seem; the execution of such initiatives requires deliberately designed data-capture engagement technology. When this is accomplished, engagement efforts can then be translated into profits. With our insights, physicians will not complain to field representatives about a poorly executed system, and representatives will have real time geographic compliance data immediately accessible and can change the conversation to include how your product accomplishes superior endpoints.

Components of the Precision Patient Engagement Program: Since improving adherence and persistence requires proactive engagement, proactive systems should be employed by the pharmaceutical patient engagement program as well. Beyond anticipating when and how a patient can experience an administrative or compliance issue (think financial assistance, co-pays, forgot medication while on vacation) our machine learning algorithms personalize the responses to the patient as empowered by frequent touchpoints.

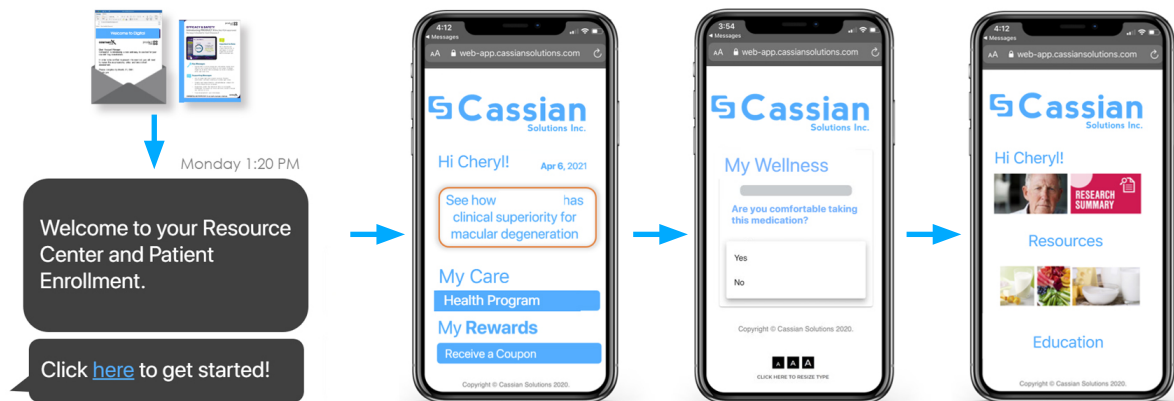


Figure 4: Precision patient engagement connectivity

The marriage of embedded data collection and advanced data analytics enables the system to identify the best patient interaction mode. When the patient is engaged, the right answers are collected and the interaction is transformed into improved commercial outcomes. Figure 4 depicts the connectivity that powers the precision patient engagement program, along with the solutions provided to the patient.

Precision Patient Engagement: Patient engagement systems should enable interactions that provide the greatest potential of sincere patient engagement to collect insightful responses. CassianRx leverages intelligent omnichannel that determines the ideal frequency, method, and message for engaging each patient. Each patient touchpoint, from adherence texts, email reminders, or payment solutions are dynamic collection opportunities that enable insights for your team. Further, these touchpoints also power the engagement and patient connection as well. Through these touchpoints the technology actively learns from each patient and develops deep patient connection and greater engagement over SMS, Email, Web, and App when applicable. It is through this intelligent interaction and data collection that we consider our system to embody *Precision Engagement*. When we apply prescription fill data and self-reported adherence and persistence to the model, the messaging, engagement, and frequency automatically adapts to produce the greatest available adherence and persistence from a digital system.

Patient Assistance Modules Provide:

- **Adherence support & reminders:** Personalized schedules to boost patient compliance and remove barriers to care by providing items such as refill requests, and needs based evaluations to address issues before they arise.
- **Clinical Engagement:** Linked opportunities to engage with clinical support staff through live chat, complete adverse event reports and clinical assessments.
- **Affordability, Payment Assistance:** Relevant payment materials and support help patients stay on therapy, including benefits investigation, co-pay assistance and more.
- **Education:** Educational insights aligned with engagements to improve patient decision making and involvement in care.
- **Provider Portal:** Relevant information is shared with a provider to ensure care team involvement.

Data & Analytics: In addition to delivering an engagement system that continuously adjusts to deliver superior results, CassianRx goes to great lengths to translate results into your business success. CassianRx applies data and analytics against the following to ensure outcomes are met for your patients and team:

- **Impact:** By leading with unparalleled technology and outcomes-led engagements, CassianRx improves patient behavior, alleviates burden to improve fills and time on therapy.
- **Report:** Patient engagements are designed to maximally involve patients in care and collect insights, so that patient actions and activities become clear, and reasons why therapy were discontinued.
- **Measure:** Real-time insights allows your team to apply new tactics, evaluate outcomes of changes in engagement strategies and determine optimal support. Quantitative evidence of your impact on patient outcomes to stakeholders is provided.
- **Predict:** Great analytics provide insight into future activities and performance. This final level of data collection and reporting gives power and sales to those who wield it. Predicting time-on-therapy permits appropriate allocation of market access resources.

Addressing business concerns: The burdens of patient enrollment are alleviated when digital enrollment becomes a standard component of any patient support offering. Patients entering through a simple smart-phone login can access a myriad of services while also consenting to further engagements. Further, providing the team that is responsible for patient engagement with cut and ready modules that can be used by market access teams, reps, and leadership ensures that the impact of patient services can be translated into results. Similarly, companies with existing patient services can make use of a fully accessible API (Application Programming Interface) that embeds the data collection and analytics technology into existing services.

CassianRx understands that each product is different and unique, as are the teams that lead them. Therefore, CassianRx always takes a collaborative and adaptive approach to ensuring each team's business goals are designed into the engagement plan. Figure 5 depicts the hands on approach CassianRx takes with each pharmaceutical client.



Figure 5: Program development with CassianRx

Conclusion: Patient engagement systems have proven to deliver superior performance and patient outcomes for those who utilize them to their fullest extent. Embedding the right technology that allows for active personalization and enhanced data collection can power improved commercial outcomes for your team. Cassian Solutions Precision Patient Engagement improves patient experiences providing one of the most productive methods of delivering superior sales results for your commercial team and launch initiatives.

For more information, please reach out to Collin.Wolf@CassianRx.com or visit <https://cassianrx.com>.

Endnotes:

1. Pharma3d "Rewriting the Script for Marketing in the Digital Age" [PHARMA 3D | Rewriting the Script for Marketing in the Digital Age](#)
2. PMLive, "The business case for patient engagement" [The business case for patient engagement - PMLiVE](#)
3. Salesforce, "4 Ways Pharmaceutical companies can drive patient engagement" <https://www.salesforce.com/blog/pharmaceutical-patient-engagement/>
4. Vertex GPS Program, <https://www.vertexgps.com/>
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6. McKinsey, "The new world of patient engagement" [The new world of patient engagement | McKinsey](#)