RESEARCH REPORT

Advisory Board

Breaking Down Barriers to Medication Adherence

Insights from the 2019 Cross-Industry Summit

PUBLISHED BY

Pharmacy Executive Forum

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RECOMMENDED FOR

Health care executives, pharmacy leaders, primary care providers, health plans, pharmaceutical companies

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About the 2019 Cross-Industry Summit

On September 9, 2019, Advisory Board convened executives representing health plans, pharmaceutical companies, and health systems for an interactive workshop on the topic of medication adherence and the role of digital adherence solutions.

The group discussed the size and scope of the medication adherence challenge, the shortcomings of existing adherence tools and approaches, how each stakeholder group prioritizes and approaches adherence challenges, and opportunities for collaboration across payers, providers, and pharmaceutical manufacturers.

This briefing highlights the most important takeaways from the meeting and Advisory Board research on the topic. Read on to learn how you can improve medication adherence at your organization—and what that can mean for patient care.

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1. Advisory Board is a subsidiary of Optum. All Advisory Board research, expert perspectives, and recommendations remain independent.

From compliance to shared decision-making

Session overview:

To frame our conversation and provide shared terminology, Advisory Board researchers surveyed the literature to understand the size and scope of the medication adherence challenge, the range and effectiveness of digital adherence solutions to date, and proposals for assessing the value of digital health tools broadly. The session began with a presentation of research findings, followed by a Q&A session.

Medication adherence is complex and multifaceted. It cannot be treated as a stand-alone issue.

For a patient to realize the value of drug therapy, many things must happen. The prescriber must prescribe the optimal drug, ensure that the patient can access the drug, help the patient take the drug as prescribed, and address any side effects that may arise. Notably, only one of those things—taking the medication as prescribed—refers to medication adherence. But all the other factors listed, as well as certain patient-specific issues, also affect adherence.

Those factors include personal values as well as an array of circumstantial issues such as living conditions, financial insecurity, and access to transportation. Simply trying to increase medication adherence without understanding patient goals, preferences, and social context—or whether the medication is truly appropriate in the first place—misses broader issues that can have a more substantial impact on total health outcomes.

Common factors[1] influencing patient adherence

Patient-related

- Knowledge and perceived risk of disease
- Perceived benefit of drug relative to other options
- Motivation and confidence
- Cognitive impairment

Therapy-related

- Complexity of regimen
- Duration of therapy
- Actual/perceived side effects
- Frequency of regimen changes

Socioeconomic-related

- Limited health literacy and language proficiency
- Unstable living conditions
- Lack of insurance
- Transportation issues
- Cost of medications

Condition-related

- Lack of symptoms
- Severity of symptoms
- Depression and behavioral health conditions

1. Does not include common health system process barriers.

Source: Watanabe JH, et al., "Cost of Prescription Drug-Related Morbidity and Mortality," *Ann Pharmacother*, 52, no. 9 (2018): 829-837; Advisory Board interviews and analysis.

The terms "adherence" and "compliance" fail to capture the importance of the patient-provider relationship in influencing drug therapy outcomes.

The practice of medicine is complex and requires collaboration between patients and providers. But medication adherence is often seen as simply a question of patient willpower. This view fails to acknowledge the responsibilities of the clinical care team.

Compliance is generally defined as the extent to which the patient's behavior matches the prescriber's recommendations. This implies that patients should follow those recommendations unquestioningly. However, studies have shown that patients' personal circumstances and beliefs are critical in driving appropriate medication use.

To better reflect the shared interests of both prescribers and patients, many health care professionals have shifted to using the term "adherence" instead of "compliance." This better describes the process where appropriate treatment is decided by the prescriber after a discussion with the patient. Others have gone a step further, preferring the term "concordance." This emphasizes the fact that the clinician and patient should agree about treatment needs and openly discuss perspectives and concerns related to the proposed medication regimen before making a final decision.

Attendees at our summit agreed that concordance is the desired end goal. However, they also acknowledged that most institutions are at the stage of simply measuring compliance—just looking at whether the patient took the medication as prescribed.

Existing processes create barriers to meaningful patient-provider discussions about drug therapy.

One issue standing in the way of more collaborative conversations on medication use is lack of provider visibility into patient concerns, beliefs, and environmental context. There are several causes of this lack of visibility.

First, providers don't have the time to surface this information during visits that often last only 10 minutes. They are forced to prioritize the limited time they have face-to-face with the patient. In some cases, providers will rely on medical assistants or other members of the care team to surface this information and flag it for discussion during the visit. However, the participants in our summit shared personal anecdotes suggesting that this information is often not relayed effectively or accurately. One participant, for example, said that she had recently experienced side effects from a medication and wanted to discuss the concern with her physician. After relaying this information to the medical assistant during the intake process, the physician began the visit by saying, "I understand the medication is working well for you." The patient was left wondering if their side effects were considered acceptable or if they should raise the concern again.

Second, providers may not have the training and skills needed to facilitate open, collaborative conversations with their patients. That keeps them from surfacing important information about a patient's beliefs, values, circumstances, and concerns. Thus, even with more time, prescribers may not get the right information or feel equipped to handle the responses.

Lastly, most prescribers do not have visibility into the cost of the drugs they're prescribing. This makes it difficult to have honest conversations about affordability and trade-offs—one of the biggest barriers to adherence. Beyond the cost of various therapeutic alternatives, providers also lack insight into any given patient's total medication cost burden. Thus, the provider may underestimate the difficulty of adding another medication to a regimen even if, by itself, the medication seems to be affordable.

Source: Advisory Board interviews and analysis.

Successful adherence interventions exist, but they're not being scaled to make a significant impact.

The literature contains a number of evidence-based adherence interventions—each designed to address an array of different drivers of non-adherence. These range from human interventions such as case management, to support tools like adherence packaging, decision aids, and risk communication.

However, it is not clear which evidence-based interventions are best, which interventions should be applied to specific patient populations or circumstances, or how to fund these interventions at scale.

Consequently, half of all patients are non-adherent at any given time, with drop-off starting at the point of simply filling and picking up an initial prescription.

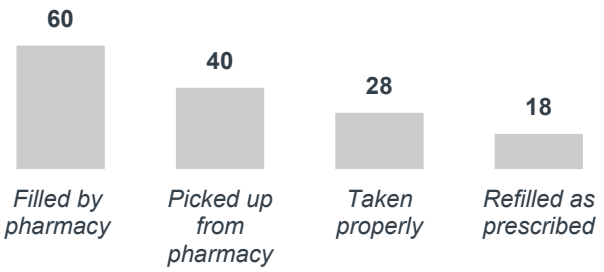
DATA SPOTLIGHT

Interventions with evidence-based support

- Case management preceded by intensive interdisciplinary assessment
- Collaborative care and health coaching (by phone or in person)
- Education, behavioral support, and social support
- Pharmacist or physician access to patient adherence data; patient access to medical records
- Decision aids, reminders, risk communication
- Blister packaging

Medication adherence statistics

For every 100 prescriptions written, on average:



50% of patients are non-adherent to their medications at any given time

Source: Viswanathan M, et al., "Interventions to Improve Adherence to Self-administered Medications for Chronic Diseases in the United States: A Systematic Review," *Ann Intern Med.*, 157, (2012): 785–795; "CDC Public Health Grand Rounds: Overcoming barriers to medication adherence for chronic diseases," U.S. Department of Health and Human Services and Center for Disease Control and Prevention, February 21, 2017; Advisory Board interviews and analysis.

Many providers are looking to digital technology as a potential solution.

Venture capitalists, technology start-up firms, and others have made an investment in digital health to solve a broad range of heath care problems, including medication adherence. There are now more than 318,000 digital health applications on the market, with approximately 200 new health applications added daily.

The most significant difference in the range of medication adherence tools available is the degree to which they enable connectivity with the clinical care team. Most tools and applications can be categorized as either “static” or “interactive” tools. Static tools include reminders or supplemental education patients can read on their own between physician visits. Interactive tools include remote monitoring and internet of things (IoT) technology, photo- or video-enabled adherence trackers, “smart pills,” and side effect management tools.

Two broad categories of solutions designed to improve adherence

First generation: Static tools

Reminders

- App-based reminders to take medications at a particular time
- Reminders are a common component of many adherence-based tools

Supplemental education

- Provide virtual education to patients and/or caregivers
- May be drug-specific or condition-specific

Second generation: Interactive tools

Remote monitoring

- Often utilizes IoT technology
- Data may be shared with clinicians and/or caregivers

Adherence trackers

- Attempt to track whether or not a patient takes their medications
- Includes “smart” pill bottles, patient taking photo of medications, etc.

Proactive side effect management

- Tracks patient experience
- Identifies opportunities for timely intervention, medication changes

Source: Advisory Board interviews and analysis.

The most effective technology improves efficiency while fostering a greater sense of trust, personalization, and accountability.

Rather than viewing technology as a replacement for clinical services, leaders should view it as a tool for prioritizing activities and supplementing patient interactions. These technology-facilitated interactions will often be more high-touch than the existing standard of care. However, they also have the potential to create an even deeper sense of connection and accountability on the part of the patient.

A representative of one health system at our summit explained how they enroll patients in their remote monitoring program. They hold an in-person care team discussion with patients before discharge. High-risk patients meet with a nurse and community health worker to form an initial relationship and discuss the goals of the program. The patient learns who will be on the other side of the technology once they go home—putting a face behind the technology. These discussions require a lot of time and coordination up front, as well as additional time to follow up with patients once they are enrolled in the program.

Taking the time to establish this relationship can pay off. Another participant at the summit explained that patients are often motivated to modify their behavior when they feel that a person will be watching their health status, not just a robot. For example, a patient "knows he'll be called out if he cheats on his diet" and doesn't want to let his health coach down.

Stand-alone technology and tools developed in silos are more likely to create new problems or exacerbate existing ones.

The least effective technology, in contrast, fails to establish connectivity and accountability. During our summit, conversations about adherence technology limitations quickly turned to general IT interoperability challenges and information overload. The group raised four major sources of frustration:

1. There are an overwhelming number of tools, and it's difficult to evaluate their effectiveness.
2. Many tools do not integrate well with existing workflows, making them impractical for clinicians and patients.
3. Some tools are duplicative or directly in conflict because they were developed by different stakeholders for different sub-populations.
4. Technology-only solutions cater to patient populations who are comfortable with technology and exclude those who aren't, exacerbating existing health disparities.

DATA SPOTLIGHT

Common limitations of existing technology solutions

Overwhelming in number and unverified

318K+ Health apps now available

2% Of mobile apps for diabetes are associated with clinically meaningful outcomes

Developed in silos

13.6% Of free medication adherence apps were developed with involvement from health care providers

Poorly integrated into existing workflows

50% Of health apps are downloaded fewer than 500 times

27% Of patients still use medical or fitness apps after 90 days

13% Of clinicians use condition management apps in collaboration with patients

Can exacerbate health disparities

42% Of rural Americans do not subscribe to home broadband

39% Of Americans age 65+ do not own a smartphone

40% Reduced likelihood that an African American patient will use a hospital patient portal relative to a white patient

Source: Birnbaum F, "Patient Engagement and the Design of Digital Health," *Academy of Emergency Medicine*, 2015; "The Growing Value of Digital Health," *IQVIA*, 2017; Pew Research Center, "Internet/Broadband Fact Sheet," https://www.pewinternet.org/fact-sheet/internet-broadband; Landi H, "Study finds age, race disparities in hospital patient portal use," Fierce Healthcare, https://www.fiercehealthcare.com/tech/study-finds-age-race-disparities-hospital-patient-portal-use; "IQVIA Institute for Human Data Science Study: Impact of Digital Health Grows as Innovation, Evidence and Adoption of Mobile Health Apps Accelerate," *IQVIA*, https://www.iqvia.com/newsroom/2017/11/impact-of-digital-health-grows-as-innovation-evidence-and-adoption-of-mobile-health-apps-accelerate; Veazie S, et al., Mobile Applications for Self-Management of Diabetes, AHRQ, republished at https://www.nature.com/articles/s41746-019-0111-3; Nikolova S, "28 percent purely digital players transform the health market," R2G, https://research2guidance.com/28-percent-digital-players-are-transforming-the-mhealth-market; Advisory Board interviews and analysis.

Leaders must come to shared definitions of value to determine which tools hold promise.

To assess medication adherence solutions, academic and industry leaders are devising value frameworks to guide decision-making.

Express Scripts announced in 2019 that they are developing a digital health formulary to comprehensively evaluate apps based on benefits and outcomes as well as usability. The goal is to determine which apps warrant insurance coverage and to create a pathway for prescription-only digital therapies.

Researchers at Johns Hopkins University have proposed a similar evaluation. Their research shows that industry leaders should evaluate solutions on the basis of four criteria: accuracy, clinical value, usability, and cost.

SPOTLIGHT

Express Scripts digital formulary

Pharmacy benefit manager • St. Louis, MO

- First formulary for digital health solutions; launching in 2020
- Pharmacists, physicians, and experts in health research and user experience will review clinical outcomes and therapeutic benefit data to determine which apps will be covered by insurance
- Will also create a pathway for payer coverage of prescription-only digital therapies

Digital health scorecard

Johns Hopkins University • Baltimore, MD

- Proposal for validating a growing list of digital health offerings in a consistent way
- Framework would evaluate solutions based on four criteria:
  - Technical accuracy (security and interoperability, technical performance compared to gold standard)
  - Clinical value (comparison of impact to existing gold standard, based on real-world testing)
  - Usability (helpfulness, effectiveness, likeability)
  - Cost (purchase price, start-up cost)

Source: "Digital Health Made Smarter and Simpler," Express Scripts, May 16, 2019, https://lab.express-scripts.com/lab/insights/industry-updates/digital-health-made-smarter-and-simpler; Mathews, et al., "Digital health: A path to validation," *Nature*, May 13, 2019, https://www.nature.com/articles/s41746-019-0111-3; Advisory Board interviews and analysis.

Dispelling misconceptions and surfacing areas of tension

Session overview:

In conversations with participants leading up to the summit, we asked how they define and measure adherence, what they view as the greatest drivers of non-adherence, and what they would like to see the industry address. Unsurprisingly, there were significant differences in terminology, prioritization, and perceived levels of control within and across stakeholder groups.

Through a series of small group activities and discussion at the meeting, participants unpacked some of these differences, dispelled misconceptions, and surfaced areas of common interest. Specifically, participants were asked to respond to questions about their strategic priorities, active medication adherence initiatives, and the role of technology in medication adherence—first as individuals, then within their peer group. Each stakeholder group then shared their perspective with the broader group and fielded questions. This section summarizes key themes from those discussions.

Participants had similar core definitions of adherence but emphasized different elements.

The group generally defined adherence as getting the right medication to the patient and ensuring that the patient takes it properly. Physicians and pharmacists viewed their role in the process as resolving access barriers—proactively surfacing adherence concerns, connecting patients to financial assistance, completing prior authorizations in a timely fashion, and delivering medications to the patient as soon as possible—sometimes even before they leave the care of their physician. One example cited was bedside medication delivery programs that ensure patients being discharged are able to leave with their medications in hand.

In contrast, health plans and manufacturers emphasized the importance of seeing a care plan through to completion and tended to view education as the primary lever by which they could achieve this goal.

Source: Advisory Board interviews and analysis.

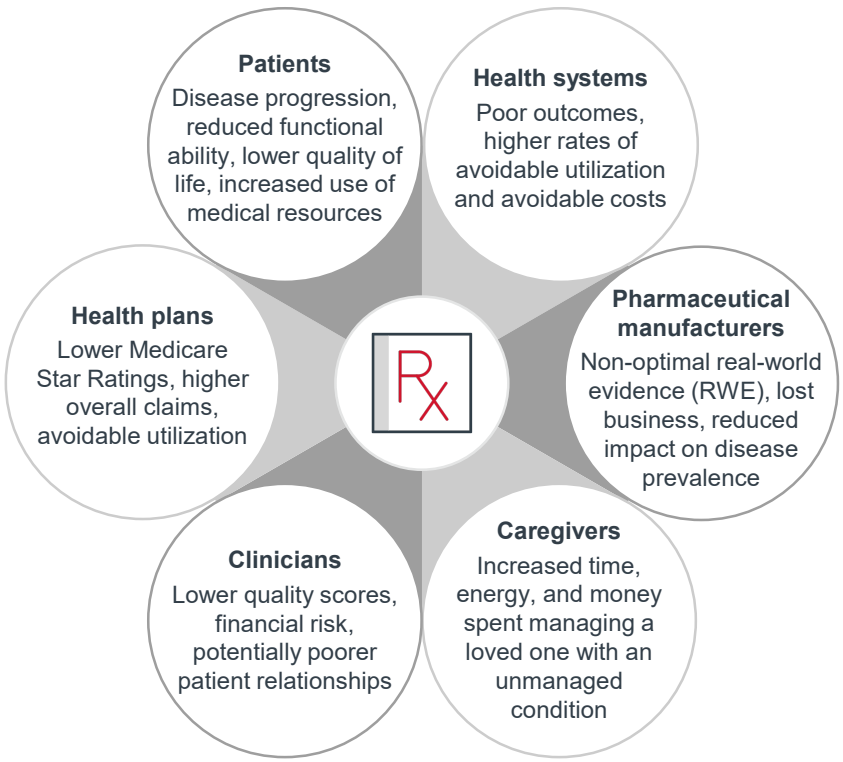
While all stakeholders want to improve medication adherence, promoting adherence did not explicitly rise to the top of anyone's to-do list.

Broadly, providers expressed being most acutely focused on improving access to medications and clinical services, while health plans were most focused on lowering the total cost of care.

Participants representing pharmaceutical manufacturers had the most diverse set of strategic priorities, including a focus on collaborative partnerships, developing patient solutions, working across internal silos, and navigating regulatory obstacles. Adherence was a topic embedded in other priorities, but it wasn't receiving dedicated funding and attention—despite it having clear financial consequences.

DATA SPOTLIGHT

Consequences of non-adherence by stakeholder



Quantifying the risk

$250B

Potential revenue forfeited by pharma each year due to non-adherence

$26.9B

Estimated costs avoided by health systems through increased medication adherence between 2011–2015

13%–18%

Potential revenue forgone for Medicare Advantage plans that go from a 4-star to a 3-star rating

Source: "Medication Adherence: Pharma's $637 Billion Opportunity," Healthprize Blog, February 18, 2018, https://healthprize.com/blog/medication-adherence-pharmas-637-billion-opportunity/; "2018 National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report," US Department of Health and Human Services, Centers for Medicare & Medicaid Services, February 28, 2018; "The Impact of Star Ratings on Rapidly Growing Medicare Advantage Market," Navigant, 2018, https://www.navigant.com/insights/healthcare/2018/medicare-advantage-star-ratings-analysis; Advisory Board interviews and analysis.

Misconceptions centered on money, time, and intent.

At our summit, each group of stakeholders felt that their intentions were misunderstood. In particular, they felt that they were perceived as caring only about money—either maximizing profits or minimizing their costs, to the detriment of patients—or as having more resources than they really do.

The most robust discussion was about time as a resource. Physicians expressed frustration at the sentiment that everything wrong in health care could be fixed if primary care providers discussed certain issues during office visits. One physician said she spends an hour every day wading through faxes sent by health plans to figure out what information is accurate or useful, and then reconciling conflicting reports. This comment sparked a broader conversation about well-intentioned efforts that waste time and resources.

Technology was identified as an enabler for providers, rather than a solution for patients.

Interoperability emerged as the most significant barrier to existing technology-based solutions. IT vendors, especially EHR systems, took much of the blame. Each participant expressed their frustration that none of the systems they used could meaningfully share information. One provider said:

> *"It's not the patient interface that needs to be fixed—it's the [provider-facing tools] we're working with. Patients shouldn't have to use an app as a workaround for ineffective tools and infrastructure in the provider office space."*

Participants in the summit expressed that patient-facing apps weren't the place to start. Instead, they'd prefer tools that can do the following:

- Quickly determine coverage
- Manage prior authorizations
- Present drug options with cost comparisons
- Provide insight into the total medication cost burden of a given patient
- Identify adherence barriers and opportunities for real-time intervention
- Increase patient engagement
- Bridge communication gaps between patients and providers
- Integrate multiple information sources into one platform

Many payers offer tools with these functions, but there is no single, unified platform that works across all patients and all payers.

Current initiatives related to adherence are highly variable in scope.

Pharmaceutical manufacturers at our summit shared plans to invest more heavily in research to better understand the entire patient journey. They plan to look at various types of patients and the specific adherence barriers they face. Manufacturers acknowledged that one of the obstacles is proving the value of adherence solutions, since disease-specific interventions may not be scalable to patients with other conditions.

Health plans said they're focused on expanding the role of the clinical pharmacist to promote adherence. Clinical pharmacists can provide comprehensive medication reviews, condition- and medication-related education, and ongoing coaching and support.

Providers were largely focused on removing internal, health system barriers to adherence. They expressed interest in being able to provide year-long prescriptions, creating dedicated teams for medication access, and implementing navigation platforms to track patient care across the continuum.

Source: Advisory Board interviews and analysis.

Opportunity to elevate the quality of medication education

Session overview:

The third session at our summit focused on the patient experience. Participants listened to audio clips of real patient stories about adherence challenges and shared their own experiences. The group then engaged in an interactive exercise, ranking five adherence barriers on the basis of perceived degree of impact on adherence and outcomes, and perceived ability to address the barrier.

The takeaways below summarize the results of that exercise and broader themes from the discussion. The appendix includes a detailed breakdown of how each stakeholder group ranked each barrier to adherence.

Major patient challenges impacting medication adherence

Cost and coverage

Beliefs and values

Education

Cognition

Socioeconomic context

All five barriers to medication adherence were ranked as having a high impact on adherence.

Summit participants seemed unwilling to deprioritize any one barrier. But each stakeholder group had a different view of the relative impact of each adherence barrier on patient outcomes, as shown in the table below.

Stakeholder	Highest impact	Lowest impact
Pharmaceutical manufacturers	Education	Socioeconomic context
Health plans	Beliefs and values	Cost and coverage
Provider organizations	Cost and coverage	Education

Education and cost and coverage were the issues the group felt they had the greatest ability to address.

Perceived ability to inflect outcomes differed for the remaining categories. Most participants felt “cognition” (which was scoped to include regimen complexity and forgetfulness) was a barrier they were only moderately equipped to address—with providers reporting the greatest optimism. Participants felt even less equipped to address “beliefs and values,” with payers reporting slightly more optimism than providers and pharmaceutical manufacturers.

Source: Advisory Board interviews and analysis.

Education fell in the "sweet spot." It has a high impact on adherence and all stakeholders feel they have a high ability to influence it. That makes it a prime target for cross-industry collaboration.

In our discussion, however, we found that education also served as a proxy for patient goals, beliefs, values, and activation—all of which can be influenced by education.

Summit participants agreed that rather than pushing out a greater volume of educational material or increasing patient exposure to certain messages, the industry should focus on elevating the quality and type of education patients receive. Patients shouldn't receive just scientific materials. Instead, providers should focus on education that addresses goals, trade-offs, how the treatment might affect a given patient, and what role the patient should play in achieving the desired outcome.

Mistrust of the health care system is often an invisible barrier to medication adherence.

Another factor influencing medication adherence is that many patients don't trust the health care system. This may lead patients to not take medications as prescribed. Providers need to uncover and address these feelings of mistrust, or else a patient may fail to take medications as directed (or at all) once they go home.

One physician in our summit shared that she serves a largely minority population and that many of her patients are skeptical of the health care system. For instance, some patients view generics as inferior to branded drugs. They feel that getting a prescription for a generic means that they're receiving inferior care. Other patients may accept the generic but then become skeptical when the color and packaging of the drug changes each month based on the supplier. If left unaddressed, these concerns can further erode trust in the health care system, exacerbate cost pressures, create confusion, and result in poor adherence.

There is an untapped market for "translation tools" that help people say things that are often left unsaid.

To identify and address some of these beliefs—driven by unique personal circumstances—the industry should find ways of equipping both physicians and patients with tools to have better conversations about care planning.

Many primary care clinics ask all patients about food insecurity while in the waiting room. In the same way, provider organizations can prompt patients with questions about their medications in a way that is culturally sensitive, normalized, and designed to empower patients as much as it helps providers. Without prompting, some patients may not know when and how to bring up issues such as financial stressors, work stressors, and major life events.

Despite clear opportunities to improve patient education, only one-third of participants in our summit reported it as the top adherence challenge their organization is addressing.

The largest proportion of participants (50%) are focusing most intently on addressing "cost and coverage" barriers to adherence. The remainder said they were most acutely focused on addressing socioeconomic barriers (11%) and beliefs-based barriers (6%).

Source: Advisory Board interviews and analysis.

Designing solutions in partnership with other stakeholders

Session overview:

The capstone of our summit was an interactive, cross-stakeholder exercise modeled after the popular TV show Shark Tank. Participants were asked to form groups that included at least one representative of each stakeholder group (pharma, payer, provider) and develop an idea for improving medication adherence that met certain criteria. Specifically, solutions had to involve collaboration from at least two industry sectors; take a patient-focused lens to solving problems; be feasible given the resources required; apply to multiple disease states, systems, and markets; and promote adherence in a new-in-kind way.

This section summarizes themes from the four solutions developed by meeting participants.

All the solutions proposed by summit participants centered on providing greater medication price transparency and fostering more meaningful conversations between providers and patients. Most solutions were disease-agnostic.

- **Solution 1 Goal:** Make sure complex, comorbid patients fill their first prescription.
  Strategy: Provide patients with a free cell phone during their office visit and deliver medications to the home by drone. Once the medication is delivered, the provider team will receive an alert and know to contact the patient by phone. On the call, the care team can provide medication education and address adherence needs. They can also follow up regularly with the patient and answer any questions the patient may have.
- **Solution 2 Goal:** Make drug costs transparent and promote price competition outside of rebates.
  Strategy: Provide an interface for patients to view real-time benefits and drug prices at different pharmacies in the area.
- **Solution 3 Goal:** Provide transparency into out-of-pocket costs to both patients and providers to reduce prescription abandonment rate.
  Strategy: Provide all patients with a personal ID card that captures both medical and pharmacy benefit information. Providers could scan the card and view the patient's coverage and out-of-pocket costs, complete prior authorizations, and automate prescription delivery in real time.
- **Solution 4 Goal:** Identify non-adherence in real time among atrial fibrillation patients to provide early intervention.
  Strategy: Provide high-risk patients with an Apple Watch and use the technology to monitor health and adherence. This would allow the care team to drill down into patient-specific drivers of non-adherence.

In the proposed solutions, technology's role was to provide real-time connectivity between patients and care teams, or between patients and retail pharmacies.

Each proposed solution relied on a different type of technology (cell phone, Apple watch, coverage card comparing drug prices across pharmacies, or an app). Summit participants proposed that these tools should be provided to patients free of charge. The expectation was that upfront costs would quickly be offset by reduced avoidable utilization and improved outcomes.

The measures for defining success were remarkably consistent across solutions.

Most summit participants proposed tracking prescription abandonment rate, patient and provider satisfaction, time to initiate therapy, total cost of care, adherence rates, and total patient financial burden related to medication.

Source: Advisory Board interviews and analysis.

Appendix

Results of session 3: Prioritizing patient barriers to adherence

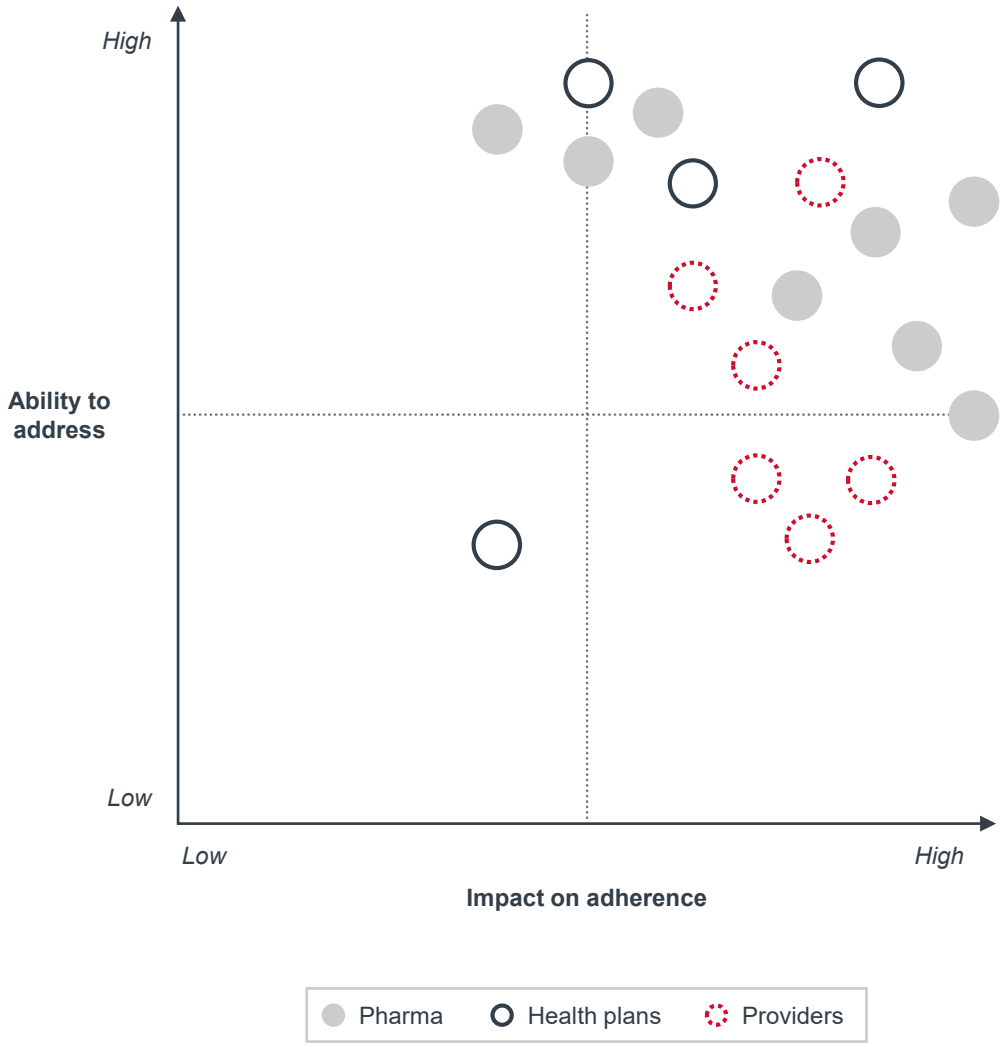
- Cost and coverage
- Beliefs and values
- Education
- Cognition
- Socioeconomic context

Patient adherence barrier 1: Cost and coverage

Examples

- I can't afford my medicine.
- I don't want to spend the amount I'm being asked to spend on medicine.
- My insurance won't cover this drug.
- I have a hard time getting my drug approved when I need it.

Cost and coverage: Group responses

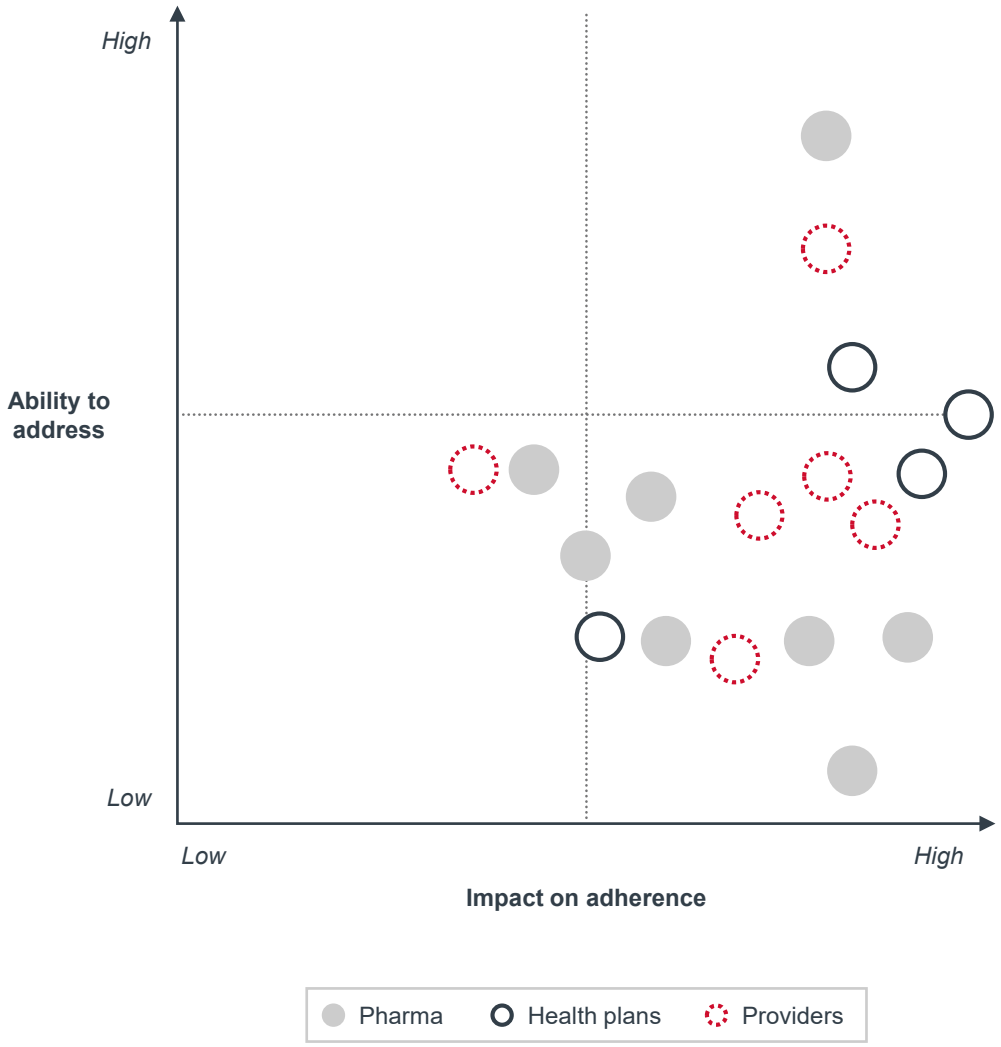


Patient adherence barrier 2: Beliefs and values

Examples

- I feel fine so I stopped taking this drug.
- I don't believe this drug will help me personally the way that I want it to.
- I'm afraid of how this drug will affect me.
- I don't like the trade-offs I have to make when I take this drug (like feeling sick from side effects), so it's not worth it.

Beliefs and values: Group responses

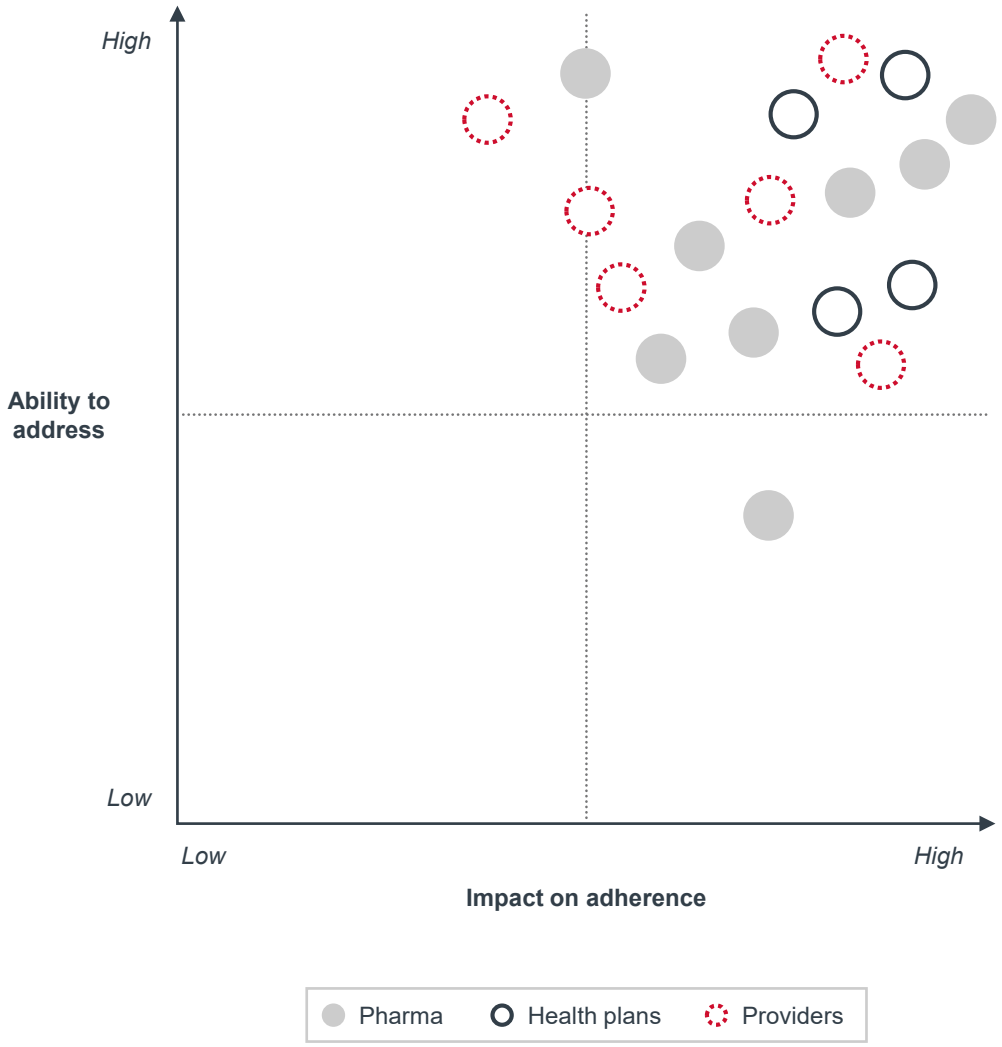


Patient adherence barrier 3: Education

Examples

- I don't know why I was prescribed this drug.
- I can't understand or don't know how to take this drug.
- I don't understand which side effects are normal versus concerning.
- I don't know who to contact about problems with this drug.

Education: Group responses

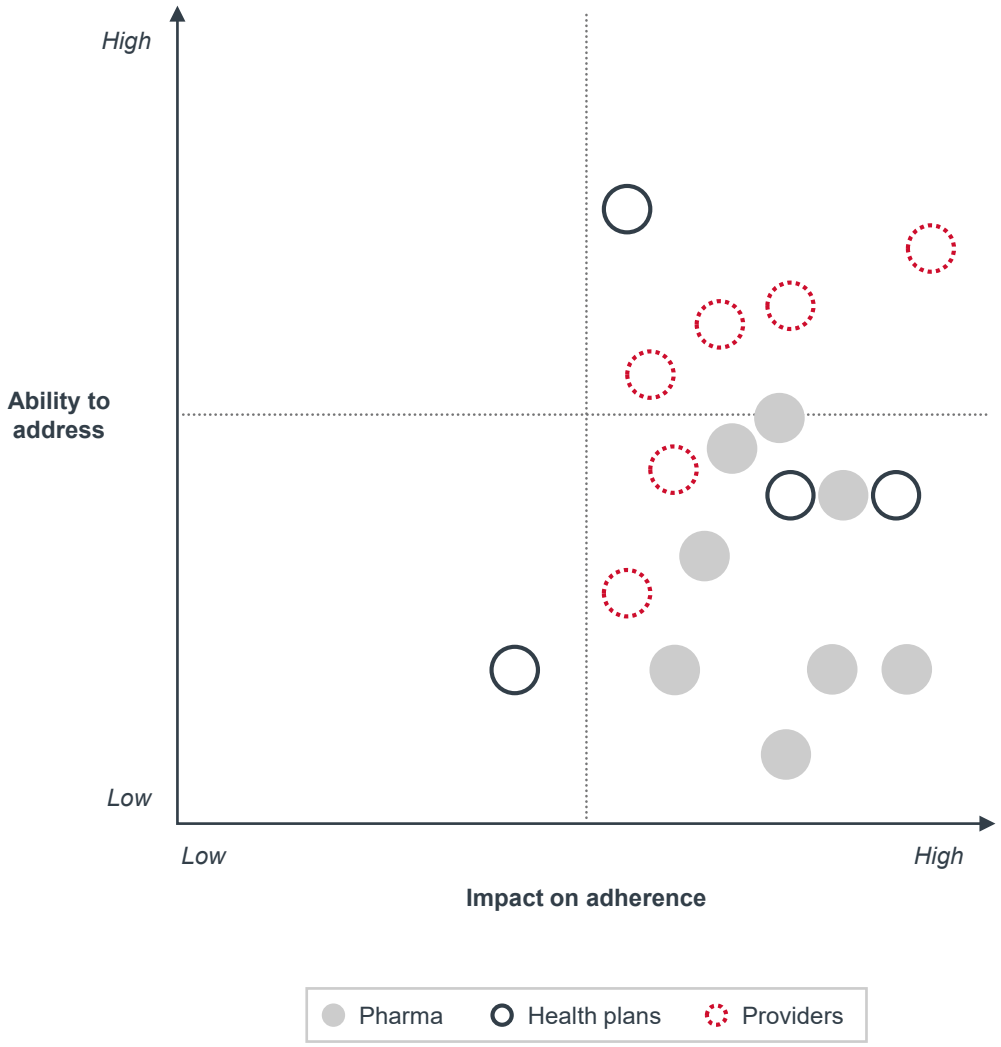


Patient adherence barrier 4: Cognition

Examples

- I take so many pills that I can't keep them straight.
- I forget to take my medication.

Cognition: Group responses

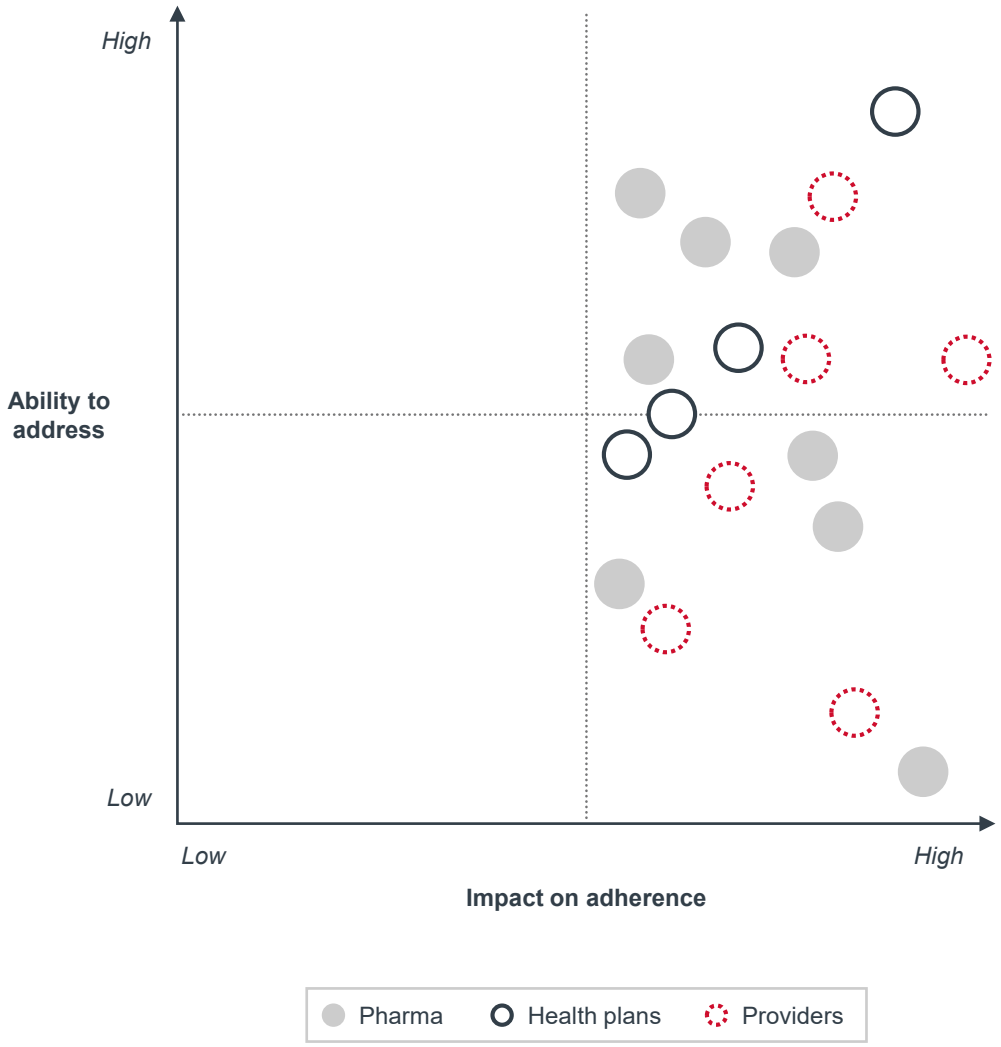


Patient adherence barrier 5: Socioeconomic context

Examples

- I don't have time to take or receive this drug appropriately.
- I can't get to the pharmacy or office where I take this drug.
- I don't have anyone to help me take my medication or handle the side effects.
- Depression or other health conditions keep me from following through.

Socioeconomic context: Group responses



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