

The Appian logo is displayed in white, bold, sans-serif font against a dark blue background. The background of the entire page features a network of light blue dots connected by thin lines, with some nodes highlighted by concentric circles, suggesting a digital or data network theme.

**Appian**

# Intelligent Automation for Healthcare Payers

NEW APPROACHES TO MEDICAL MANAGEMENT

by Cate McConnell

EXECUTIVE PERSPECTIVE  
**HEALTHCARE PAYERS**

## EXECUTIVE SUMMARY

Healthcare is one of the most costly industries in the United States—but also one of the most vital. At some point in our lives, everyone visits a doctor, uses healthcare services, and pays out-of-pocket medical bills.



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Healthcare organizations are more empowered than ever to harness information and better serve their members across the care continuum.

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Health plans and providers have been challenged for decades to lower the costs of care while improving outcomes for members and promoting overall population health and satisfaction. The “Triple Aim” in healthcare was first developed by the Institute for Healthcare Improvement in 2007 as a framework to simultaneously improve the patient experience, improve population health, and reduce per capita cost.<sup>1</sup> While the framework is a great aid, to many healthcare organizations it is an ambitious and difficult undertaking.

As both consumerism and big data are on the rise, healthcare organizations are more empowered than ever to harness information and better serve their members across the care continuum. However, doing this is contingent upon having the right technology in place.

To coordinate holistic health care and achieve the Triple Aim goals, health plans must implement new approaches to medical management through the use of a low-code development platform. The right platform can:

- Integrate data from various sources
- Intelligently automate processes
- Provide personalized and accessible care

This paper examines current challenges facing the industry, and explores how a low-code intelligent automation platform can foster better holistic health management that simultaneously serves members’ health and consumer needs, while lowering costs for payers.

### **CULTURE & CONSUMERISM: Treating members as customers**

The rise of consumerism in the healthcare space has led to increased expectations around speed, access, and quality of service. Today’s health plan members are digital consumers who want on-demand service, mobile self-service, and superior customer support. The consumer landscape is at a critical point where having the technology to support rising demands for seamless and convenient service can separate health plans that thrive from those that do not.

Meanwhile, member-centricity continues to be a priority. Connected devices and mounting terabytes of medical and social health data present both a challenge and an opportunity for healthcare payers.

Payers must focus on new ways to engage with their members in order to boost individual and overall population health. When members are empowered to take control of their health, they are more likely to stay engaged and remain loyal to their health plans. Activated members with full visibility into their own health can make more informed and proactive decisions, potentially improving outcomes and saving costs for both the payer and member.

A complete view of the member, including social data from non-medical sources, can help case managers identify health risks and coordinate the most appropriate care at the best price for members. However, disconnected systems make this 360-degree member view goal a 360-degree tailspin for care managers trying to find the right information by jumping between systems, wasting valuable time and resources.

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Having a complete picture of members and their non-medical information can drive better population health.

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**THE DATA DILEMMA: Too much data, not enough visibility**

Historically, health plans collected claims, or “sick” data about members. Now, with data coming from a myriad of connected wellness and tracking devices—Fitbits, glucose monitors, smart scales, and more—plans have the opportunity to collect “well” data too. These social and environmental factors, or social determinants of health (SDOH), account for 20% of an individual’s health status.<sup>2</sup> Having a complete picture of members and their non-medical information can drive better population health.

SDOH factors include access to food, quality of education, socioeconomic status, access to transportation, access to technology, exposure to crime, and more.

For example, individuals living in food deserts—typically impoverished areas with a lack of access to fresh fruits, vegetables, and whole foods<sup>3</sup>—are at a health disadvantage, and identification of this by health plans is the first step in addressing potential solutions.

**Social Determinants of Health**

 <p><b>Economic Stability</b></p> <ul style="list-style-type: none"> <li>• Employment</li> <li>• Income</li> <li>• Debt</li> </ul>	 <p><b>Community</b></p> <ul style="list-style-type: none"> <li>• Housing</li> <li>• Transportation</li> <li>• Safety</li> </ul>
 <p><b>Education</b></p> <ul style="list-style-type: none"> <li>• Literacy</li> <li>• Language</li> <li>• Early Childhood Education</li> </ul>	 <p><b>Food</b></p> <ul style="list-style-type: none"> <li>• Hunger</li> <li>• Access to Health Options</li> </ul>
 <p><b>Community</b></p> <ul style="list-style-type: none"> <li>• Social Support</li> <li>• Discrimination</li> <li>• Stress</li> </ul>	 <p><b>Healthcare System</b></p> <ul style="list-style-type: none"> <li>• Access</li> <li>• Quality of Care</li> <li>• Cultural Competency</li> </ul>



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Treatment is seldom a straight line from point A to point B, and almost never remains within the confines of a hospital's four walls.

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There is a lot of untapped information in this type of social data, and several care issues arise when these factors are overlooked.<sup>4</sup> Without access to a nearby clinic or hospital for preventative care, for instance, people often default to an emergency room for when they need any medical care. This fragments their health as they see a different provider each time and no relationship can develop, along with the high costs that come from emergency medicine procedures.

Also, for those in the United States without access to the Internet, these members may not be able to get information about their conditions. Therefore, health literacy remains low and members' conditions may worsen.

All of this information, along with claims data, can provide a greater view of an individual's health. Moreover, this information gives insight on a member's ability to manage their health based on external factors. This holistic view makes it easier for care managers to understand and engage with members, and ensure they are receiving care that meets their individual needs. In doing so, plans can help foster greater member engagement, lower long-term health costs, and avoid future readmissions.

Health plans looking to deliver personalized care are already looking at SDOH. The challenge is in integrating this data into existing systems and workflows and proactively addressing these factors.

### **NAVIGATING THE DIGITAL CARE CONTINUUM**

The care continuum has several touchpoints along the pathway to reaching desired health outcomes. Treatment is seldom a straight line from point A to point B, and almost never remains within the confines of a hospital's four walls. Managing these care transitions in a smooth and efficient manner can be cumbersome for both payers and providers, and frustrating for members.

Process management that includes insights from multiple data sources helps to map out a smooth journey for the member, thereby increasing satisfaction and reducing the risk of attrition. Streamlining processes also cuts administrative costs—the likelihood of fines and other adverse charges is reduced since payers are operating with accurate, real-time data.

The influx of medical and social data mentioned in this paper can be integrated into key care management processes to help drive better outcomes for members and improve population health. By leveraging technology to implement new approaches to medical management, health plans can coordinate appropriate, cost-efficient care for members. This is especially key to managing prior authorizations and referrals.

## CARE COORDINATION ACROSS THE CONTINUUM: Prior Authorizations

As previously discussed, there are no specific start or end nodes in the care continuum; rather, members are added into the cycle at some point and remain in it throughout their lives. While this sounds straightforward, many health plans are slowed down by manual handoffs between providers and disconnected systems. This results in higher administrative costs and errors, and lengthier service that affects the bottom line. More importantly, it can also lead to gaps in the care continuum that hinder health outcomes in the long run.

There are several criteria care managers must take into consideration when making prior authorization decisions, such as whether a provider is in-network for members, cost analysis of similar treatments, and more. Challenges in the prior authorization process include maintaining accurate provider information as well as general communication between the two parties.

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Provider directories change frequently, with new physicians entering and leaving integrated delivery networks (IDNs) and practices all the time. Keeping up with these changes is difficult for payers, who are often occupied in care coordination functions instead of administrative duties. Outdated directories can lead to numerous problems down the line for members. For example, a member may incur unexpected medical costs because a care manager approved treatment with a physician who was originally in-network, but is now operating outside of coverage. There are health risks to this too, as some members could benefit more from certain treatments but didn't have appropriate physician information available in the provider directory. Another consequence of provider directory inaccuracy is regulatory fines, which can be extremely costly to the business.

Provider data and network management issues could be solved with improved communication with providers. However, payer-provider relationships are often fragmented and outdated. Many of these interactions occur in the form of fax and paper mail, which can easily become misplaced or inaccurately transposed into internal systems, not to mention creating security concerns with personal information.

Denials and appeals occur more frequently since supporting information either hasn't been provided the first time or has gotten lost in the paper shuffle. The speed, or lack thereof, at which most payers and providers currently interact leads to delays at the expense of the business. Additionally, errors that result from these interactions can have substantial health and regulatory consequences.

Tackling prior authorization challenges is the first step in improving medical management across the continuum. Once this is accomplished, health plans can focus on follow-up care throughout the continuum, such as referral management.



## CARE COORDINATION ACROSS THE CONTINUUM: Referral Management

A referral management system is a unique and powerful tool for health providers to keep track of their patient referrals throughout the care continuum. Its main goal is to improve and streamline communication among primary care physicians, specialists, and any other health providers involved in a patient's care.

Too often, referrals are made by a member's primary care physician, but there is no follow-up to ensure care has been received. This can be costly and inefficient, but more importantly, it is counterintuitive to managing the health of the member.

Another challenge around referral management is ensuring that referrals are made within members' provider networks, which may be narrow or limited. Again, the importance of accurate provider data is essential. Bi-directional information sharing is critical in this area since member/patient data should be accessible to all parties, but finding the right technology to support this remains difficult.

Finally, referrals often require extra documentation, which has to be accessed and stored. This means back-and-forth paper shuffling between parties—a process made worse by siloed internal systems.

Payers must coordinate complete, streamlined care to ensure patients actually receive their referred treatment in order to reduce the costs associated with follow-up and long-term care while promoting better health. Read on to discover the right technology to better serve members' health and consumer needs while lowering costs for payers.

## A LOW-CODE INTELLIGENT AUTOMATION PLATFORM FOR CARE MANAGEMENT

Holistic health management tackles payers' challenges, and can help them achieve their Triple Aim goals.

### Here's what to look for in your technology partner:

- **System-neutral Integration** that aggregates relevant information from disparate systems, allowing for data sharing and smoother operations due to less swiveling between systems
- **Dynamic case management** that treats the member as a unique case and allows advanced automation and rules to be applied to data and processes
- **Business process management (BPM)** that can automate and turbocharge daily operations, such as referrals and prior authorizations
- **Analytics that leverage machine learning and artificial intelligence (AI)** to make intelligent predictions and health recommendations, as well as determine sentiment of members to identify attrition risk and in turn drive better insights to increase member loyalty

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Intelligent automation combines the speed and power of BPM, machine learning, and RPA with low-code development.

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In addition to the technical capabilities outlined, Gartner<sup>5</sup> recommends that health plans should focus on usability when selecting a technology partner. According to Gartner, the right technology vendor should be able to support the enterprise's clinical innovation vision with agile workflow analytics and easy application integration. Additionally, Gartner notes the importance of mobile and tablet-based access for care managers and multichannel communications, digital member engagement, and integration with member service to drive optimal care to meet member needs across the continuum.

A low-code application development platform allows healthcare payer IT professionals to rapidly develop enterprise-grade applications. Appian, the Digital Transformation Platform™, enables healthcare organizations to build powerful, natively-mobile applications by drawing applications instead of coding line by line. Appian's speed—up to 20x faster than regular development according to Forrester Research—enables health plans to innovate quickly and change with market and member demands.

The Appian Platform can integrate data from across internal and external systems into a single, unified interface for improved record management. Appian is the industry leader in case management<sup>6</sup> and intelligent BPM<sup>7</sup>, as identified by Forrester Research and Gartner. The intuitive yet powerful platform enables end-to-end process management from modeling and design through execution, management, and optimization. These processes can be continuously improved as new mandates are passed and more data becomes integrated into the platform. Further, Appian's technology partnership with Blue Prism, a leader in robotic process automation (RPA), turbocharges processes—slashing administrative costs and resulting in faster service for members. Advanced analytics and AI algorithms can be inserted throughout to assess member health holistically and predict clinical care operations.

Appian is trusted by healthcare payers for numerous solutions. Read on for specific applications where the Appian Platform can benefit payers looking to improve their clinical care operations.

### **NEW APPROACHES TO MEDICAL MANAGEMENT**

As mentioned in this paper, collecting supplemental health data from connected devices and social determinants of health (SDOH) and unifying all of this onto a single interface provides an insightful, 360-degree view into members. Once this data is integrated, machine learning algorithms can make predictions and determinations, such as identifying high-risk members who may require additional attention.

Member engagement and monitoring solutions built on Appian provide a single source of truth for member information—both medical and social. For example, care managers with visibility into SDOH like access to transportation can use that

information to coordinate rides for hospital visits. Incorporating data from connected health devices, such as blood pressure monitors, into workflows can trigger alerts for care managers to check on members, delivering superior, personalized service.



With Appian, payers can provide a single source of truth for member information and thus increase member satisfaction and retention. Health plans using Appian can rapidly develop member portals that display coverage visibility, real-time claims status, and payment information before and after procedures take place. This transparency clarifies member confusion around billing, thereby boosting satisfaction. Furthermore, by making this information accessible, members feel more in control of their health. This engagement can improve overall health and cut long term costs compared to less activated members.

When it comes to the providers they work with, health plans retain credentialing, licensure, and other important data. This data is often stored in various systems, including Shadow IT systems built by the business. Appian can consolidate all of this information into one provider record, giving payers full visibility, completeness, and accuracy in their directories. This is fundamentally important in:

- Providing a real-time database of in-network providers
- Presenting and validating necessary documentation
- Ensuring referrals are made to in-network providers
- Avoiding potential fines that can be incurred from an inaccurate provider directory
- Paying claims accurately-on time, the first time

Finally, Appian brings all of this information together and makes it actionable. Leading BPM and RPA capabilities can automate the referral process, add tasks for care managers to check on appointments, and intelligently route escalations to cut costs and optimize care. Prior authorization, utilization management, and referral management applications built using Appian enable efficient processing and real-time collaboration with providers to help support clinical outcomes. Armed with these applications, payers can ensure the most appropriate and affordable care for their members, reducing overall per capita cost for care, while slashing the risk of claim denials and file appeals for providers.



## CONCLUSION

The exponential growth of data holds great potential for health plans to better engage with members to boost overall population health outcomes. Today's digital age means that data is at our fingertips, but fragmented legacy systems hold organizations back from transforming. The right technology should integrate data from various sources, intelligently automate key care management processes, and thus provide personalized and accessible care.

**Contact Appian to learn how an agile, intelligent automation platform can help your health plan navigate today's digital care continuum and drive better health outcomes in the future.**

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## ABOUT THE AUTHOR



Cate McConnell is the Healthcare Payer Industry Practice Lead at Appian Corporation, where she is responsible for bringing the power of Appian software to health insurance companies. Cate has an extensive background in healthcare, serving as Product Owner for Payer Services at Change Healthcare (formerly McKesson Health Solutions) and Senior Manager and Partner Candidate at Deloitte Consulting. Numerous years of experience with healthcare organizations such as Anthem, Kaiser Permanente, Capital Blue Cross, Centers for Medicare and Medicaid Services, and others give Cate a deep understanding of healthcare systems and solutions. Cate earned an MBA from Duke University's Fuqua School of Business, and holds the CPHIMS certification from HIMSS. She is active in the Technology Association of Georgia's Health and Product Management groups, as well as GA HIMSS and HFMA. Cate lives in Atlanta with her husband Ray.

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2. "Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity" Kaiser Family Foundation (<https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>)
3. "Where Eating Healthy Means Trekking Out Of A Food Desert" WAMU (<https://wamu.org/story/18/02/12/eating-healthy-means-trekking-food-desert/>)
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