ACS SOLUTIONS

Intelligent Population Health Management

Payer Perspective

WHITE PAPER

Table of Contents

Lead Author

Pavan Seepana

About ACS Solutions

ACS Solutions is a leading global information technology services and consulting organization that has been serving businesses globally across industries since 1998. A trusted partner to both mid-market and Fortune 500 clients, ACS Solutions has been instrumental in each of their unique digital transformation journeys. Our extensive industry-specific domain expertise and passion for innovation has helped clients envision, build, scale and run their businesses more efficiently, for over two decades.

We have a proven track record of developing large and complex software and technology solutions for Fortune 500 clients such as Microsoft, Blue Cross Blue Shield, Cox Communications, and Novartis. We deliver on our commitments and enable our customers to achieve a digital competitive advantage through flexible and global delivery models, agile methodologies, and expert frameworks. Headquartered in Duluth, GA, and with several locations across North America, Europe, and the Asia-Pacific regions, ACS Solutions specializes in 360-degree digital transformation and IT consulting services.

For more information, please reach us at –
acssolutions@acsicorp.com

Executive Summary

Healthcare payers are worried about the rising costs per enrollee. Any measure to curb costs might damage member experiences, leading to dis-enrollment. Hence it is crucial for health plans to focus on an approach of reducing costs that don't break the member relationship. In fact, the cut-throat competition among payers in the US healthcare market is pushing business teams in payer offices to think beyond conventional methodologies and get creative.

Payers are now looking for an out-of-the-box approach that minimizes the costs while also improving patient experiences. This whitepaper aims to bring forth ways that healthcare payers can embrace cutting edge technologies and digitization to provide better care to patients while minimizing costs.

Population Health Management

Now, let's turn to the most discussed and acclaimed concept among the payer network – The Population Health Management. It focuses on the discovery of patient's present and historical health, and socio-economic conditions. Data is everywhere; it resides in patient health records in EHR; it lies in claims information; it lies in laboratories and many other touchpoints. Collection of data is critical, but collection alone doesn't satiate our need to reduce costs and improve member experiences.

This paper focuses on intelligent ways to understand the data from various sources, feed the data to multiple departments, and integrate the feedback mechanism to enhance outcomes. The approach discussed in this paper is patient-centric but derived creatively from a payer perspective, allowing the members in a health plan to embrace the payer as their best available choice for re-enrolment.

A Framework Is Key to Riding the Waves in Unchartered Waters

Implementation of Population Health Management is a big challenge, indeed, as it involves payer departments, members, and providers at various levels. The quest for simplifying the implementation led to the creation of a smart framework that can help payers to focus on key areas.

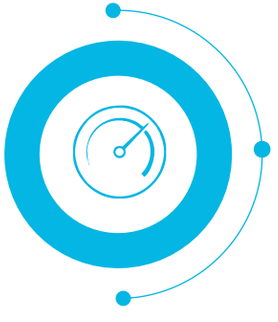
This framework aims to keep the member experience narrative in line with the payer expectations. There are five key focus areas for the implementation of a successful population health management initiative: Risk Assessment, Disease Management, Case Management, Utilization Management, Analytics, and Prediction. This paper helps in diving deep into each of the areas and provide actionable directives for effective implementation.

Disease Management

Help group the members with certain diseases and monitor visits and claims

Utilization Management

Create authorizations and make decisions using MCG content

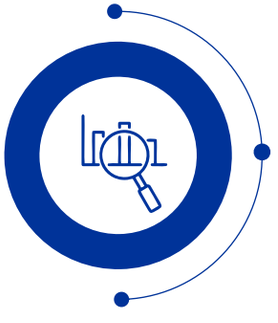


Risk Assessment

Custom Risk Scoring Logic involving social, behavioral factors along with the claims data

Case Management

Create actionable care plan with problems, goals and interventions as per care guidelines



Analytics and Prediction

Predict the possible member re-admissions and predict the member risk score patterns

A small population of members drives the majority of healthcare costs. Although accurate identification and categorization of members is just the starting step, it is critical in creating the roadmap for dealing with possible member healthcare costs and experiences. The internal departments of payers should act more connected than before to ensure a free-flow of member information, bringing in a 360-degree view of the member's condition.

Most health plans consider this as an internal exercise, but involving the member will do more benefit to the program. Members should be aware of key initiatives and efforts of the payer to improve health by regular monitoring. This awareness helps in sourcing key data specific to socio-economic conditions, which are rarely captured in the clinical visits. The framework will be applicable for members enrolling in various types of plans like Medicare, Medicaid, commercial, or group health insurance. However, it is critical to consider the member's demographic information while categorizing for risk calculations, accordingly direct the member to correct the department that can help members to improve health.

Every Individual Is Unique, and We Must Respect That!

The first step for successful implementation of population health starts with accurately understanding the member health condition by not limiting to the clinical data available over EMR and claims data but by stretching to obtain family level health conditions and social determinants of health. It is not difficult to assimilate clinical data with the advent of EMR and FHIR API resources, but more efforts are required to gather accurate data on socio-economic factors.

Consider the case of Medicaid population. Majority of this set of population face lot of barriers to access healthcare. Some of the major barriers are lack of proper home or homeless, living in food deserts, no access to transport, staying in remote areas, no nearby primary care facilities, to name a few. As per the American Psychological Association, major health care spends for the Medicaid population goes for mental health care and substance abuse. These health conditions are bi-products of socio-economic factors. With the inclusion of these factors, the members are better understood.

Member profiling involves Risk Stratification of members based on behavioral conditions, chronic conditions, physical conditions, emergency department visits, and socio-economic factors. Members are categorized as High Risk, Medium Risk, Low Risk, and Healthy using these factors. Risk scoring will take all these factors to arrive at the segregation of members, but adopting predictive models in liaison with conventional risk scoring acts as the differentiators that can show a direct impact on the payer's bottom-line costs of managing a member.

It is essential to focus on members who consume more healthcare resources and claim frequently. However, it is crucial to keep the population categorized as healthy to stay healthy consistently. Most of the time, dealing with high-risk members is planned. They were given enough attention and support to ensure a reduction in costs and maintaining health. Consider the case of a healthy member falling sick and slowly moves into the high-risk band leading to an increase in cost and operational efforts. Predictive analytics plays a key role in helping the payers in keeping track of the patients who might move from healthy to high-risk levels.

Strategy, Strategy, and Strategy!

As the members enrolling in the plan increases or if the plan currently handles millions of members, then care management needs more reliable data to act immediately. Each internal department in the payer office should have a 360-degree view of the member that details out each action performed by any other department on the member. This information helps the corresponding team to direct members or intervene at the required level.

The three key departments in the payer office that deal with a member are care management, disease management, and utilization management. With the help of the member risk stratification logic, the care management team picks up the high-risk members to analyze the required care. Even after grouping and segregating the members using risk levels, member assignment is a big challenge as it needs clinical knowledge to deal with specific cases. Overloading case managers with members reduce the efficiency in handling the cases. An analytical model to auto-assign members to respective case managers will reduce chaos.

Cross-Departmental Interaction

While case managers deal with high-risk patients and reduce the costs, disease managers focus on handling the chronic conditions that might become acute, thereby thrusting the patient to admit into a hospital or have emergency department visits. The majority of the population, health management tools, stop at the level of establishing strong communication between case management and disease management teams. Although this sounds complete, one piece of the puzzle is still missing.

Utilization management is the missing piece, and this can act as a strategic advantage to achieve low costs goal by tightly integrating this module and complete the puzzle. Part of utilization management activities, any authorization, and extended hospital stays are first brought into the notice of payer before claim kicks into the adjudication system. Based on the member's current condition, any user can refer the member to the appropriate department for better management. This integration of three key modules and allowing the member clinical, non-clinical information flow across departments will enable users to raise a flag at different levels for better healthcare experience to members.

Prediction is not harmful: neither for the patient nor for the payer.

Predictive analytics is still not seen as a go-to option for the majority of payers. Certainly, adopting predictive analytics may not yield immediate results. However, it must be noted that the late adoption will only leave the payers losing the race to competitors. Especially to gain an advantage in population health implementation, payers should not hesitate to try out predictive analytics-driven models that improve the overall healthcare experience of members.

In context to our aim of reduction in costs and improving the patient experience, it would be best to include a model to predict re-admissions and analyze the potentially preventable re-admissions. The prediction algorithm can be utilized by care management, Disease management teams to prioritize the outreach for members who have a high chance of re-admission. Understanding this parameter will help the care management team to guide the patient and provider simultaneously to ensure required clinical support is provided on time.

Power of Predicting Risk Score

There are three stages in the reduction of costs in re-admissions.

Prediction of Re-Admission: With the help of demographic, socio-economic, and clinical factors, payers can reasonably predict the possibility of re-admission. The action plan is to ensure regular monitoring of high-risk patient re-admissions and automate the workflow to outreach to avoid re-admission.

Optimal Recovery Planning: We cannot avoid a patient's re-admission every time. Still, it is essential to ensure the patient recovers quickly by monitoring the treatment course and providing the necessary guidance during a hospital stay. This helps in improving the experience and tracking the high-cost medication or procedures performed to the patient.

Discharge Planning: It is essential to have a probable length of stay. This can be predicted based on the patient's admission history for similar conditions. A utilization management nurse can help in reducing the length of stay in a hospital, thereby reducing the overall costs.

Wanted: Population Management Specialist Bots. Immediate Joining!

The critical judge for determining the success of population health management is the enrolled member. Although the measures taken by payers show improvement in the bottom line with a reduction in healthcare costs, the goal of improving patient experience fails to meet the member expectations. Payer needs to communicate the member's importance to the plan and provide personalized care that acts as a key point of difference when compared to other insurance payers in the market.

We used Design Thinking methodology to decode the patient expectations and weave the plan offerings around it. Design Thinking approach keeps customer (enrollee) at the center while creating a solution. We started with analyzing the patient day to day activities, which even includes the patient's interaction with non-healthcare aspects of life. It can be as simple as purchasing groceries nearby store, ordering a smartphone in an eCommerce platform, talking to telecom customer care, applying for a house loan, etc.

Chatbots Implementation Strategy

At every touchpoint, the enrollee carries the experience that creates conscious and subconscious patterns in the brain, which, in turn, determines their next purchase or advocating about their experience to others. An enrollee's satisfaction is driven by the swift flow of information that allows faster decision-making.

Chatbots have become exceedingly helpful in handling consequent requests from the users for quick information flow with less spending on human resource management. Chatbots can offer the best healthcare experience to a member by holding data about the patient's earlier medications, hospital visits, risk levels, plan details, and so forth. With the latest information about the member form various clinical and non-clinical sources, chatbots can help members to know about their next upcoming PCP visit, to maintain medication adherence, to find nearby in-network providers, to communicate key patient education material for managing chronic conditions, to know claims reimbursement status, etc.

Chatbots can play various roles like plan finder, enrolment assistant, appointments manager, care coordinator, customer service executive, etc. They are intelligent to learn based on earlier conversations and improvise the patient experience to new levels of customized care.

Case Study: End-to-End Population Health Management Product Creation

Problem Statement: The client has an aspirational objective to evolve to the best health plan in State by offering the most personalized service to all enrolled members and improve their satisfaction rate with an economical budget.

We followed the Design Thinking approach to ideate, prototype, validate the solution, and implemented a user-friendly web application, which enabled users to communicate across various departments in the payer office and maintain a 360-degree view of the member profiles.

The following workflow is embedded into the device-agnostic web application:

1. Configurable and Dynamic Member Risk Assessment
2. Automated Member Assignment
3. Integrated Care Management
4. Personalization of Care
5. Financial and Clinical Outcome Analytics

Any new member enrolled in the plan will flow through the predictive algorithm. It determines whether the member should be assigned for a quick assessment or for the member management team for fetching socio-economic factors. For all existing members, the clinical data from various touchpoints in the provider's

office is continuously pushed into the algorithm. This helps in understanding the current health risk of the member and accordingly assigns to the appropriate user in the medical management team.

After the auto-assignment of a member, the medical management team creates a case, completes assessment forms, and understand HEDIS compliance data to create the care map. The member is always at the center of the action plan to ensure that they remain abreast of all important communications. Any hospital admission or emergency visit of members alerts the medical management team and directs the case to get handled by an appropriate user. The client observed efficient utilization of internal resources that now focus on improving the healthcare experience for members. A chatbot integrated with the member profile helps the member to access care easily by one touch appointment bookings, closing claim inquiries, searching for nearby providers, resolve any questions related to planning benefits. By linking each interaction with members to financial and clinical benefits quantifies them, and results in outcomes like preventable re-admission and ER visits.

This solution had a high level of automation, analytics, and predictive capabilities incorporated in each workflow. This approach enabled the client to utilize population health management applications with ease and helped reduce the learning curve to deploy this application enterprise-wide. The Azure-hosted web application is made accessible in all devices with customized views.

Conclusion

The population health management platform gives payers the power to make meaningful and quantifiable decisions that aid significant cost reductions. Besides cost savings, it also helps insured members to experience the desired quality of service whenever needed. The better the patient experience, the easier it becomes for the payer to retain the member and meet their growth goals.

Throughout the document, we have emphasized the payer business team perspective. However, it is equally important to understand the internal issues in the payer's office to make such an initiative a big success. Case managers, utilization managers, and other key stakeholders will face challenges to shift from the conventional approach of treating the case to an algorithm-driven process. The implementation challenges are more likely to be overcome by involving the end-users in the design and requirements phase to buy in the ground level scenarios and blend it in the application that makes the user feel confident to accept the upcoming wave of change.

It is critical to partner with a technology partner who has deep domain expertise in both creation, implementation, and support for population health management applications. If there is an existing application that is partially helping to make up to population health management or disparate applications that operate in silos for each care division, then it is the right time to take the next step in integrating the multiple source systems and create a 360-degree view of member profiles, which helps the medical management team discover the true power of informed decision-making.