4 Best Practices to Enable Population Health Management

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Introduction

A decade of healthcare reform shifted our focus away from a fee-for-service model toward a pay-for-performance, value-based care paradigm. The implications for existing healthcare delivery systems continue to be far-reaching within an increasingly complex environment.

There is an acute need for actionable analysis of individual patients and populations, leveraging raw data from electronic health records, financial files, and hospital information systems. Physicians, providers, and payers all need better data insights to substantially improve clinical, financial, and operational outcomes.

The expansion of Accountable Care Organizations (ACOs), focused on population health management (PHM), are driving the need for population analytics. Accountable Care Organizations, according to the Centers for Medicare and Medicaid Services (CMS), are groups of doctors, hospitals, and other healthcare providers who work collaboratively and accept collective accountability for the cost and quality of care delivered to their patients.

While the PHM concept of working together to improve care at the lowest cost is ideal, for most healthcare organizations the new standards of operation are daunting to execute. This paper discusses how processes and outcomes can be improved by implementing four key best practices.

1. Enable Self-Service Analytics

In the era of big data, legacy healthcare analytics systems use inefficient report factories that simply don't meet today's needs. A new generation of data scientists are empowering individuals to explore their own data using recently available technology tools. Not only does this yield faster, more insightful decisions, it also allows IT leaders to return their focus to maintaining a secure and reliable data infrastructure. Self-service analytics yields huge dividends for individual doctors and business analysts, and also provides a single source of truth throughout the entire organization.

Because the best analytics implementations are user-created dashboards running on top of IT-managed infrastructure, optimization for self-service is essential.

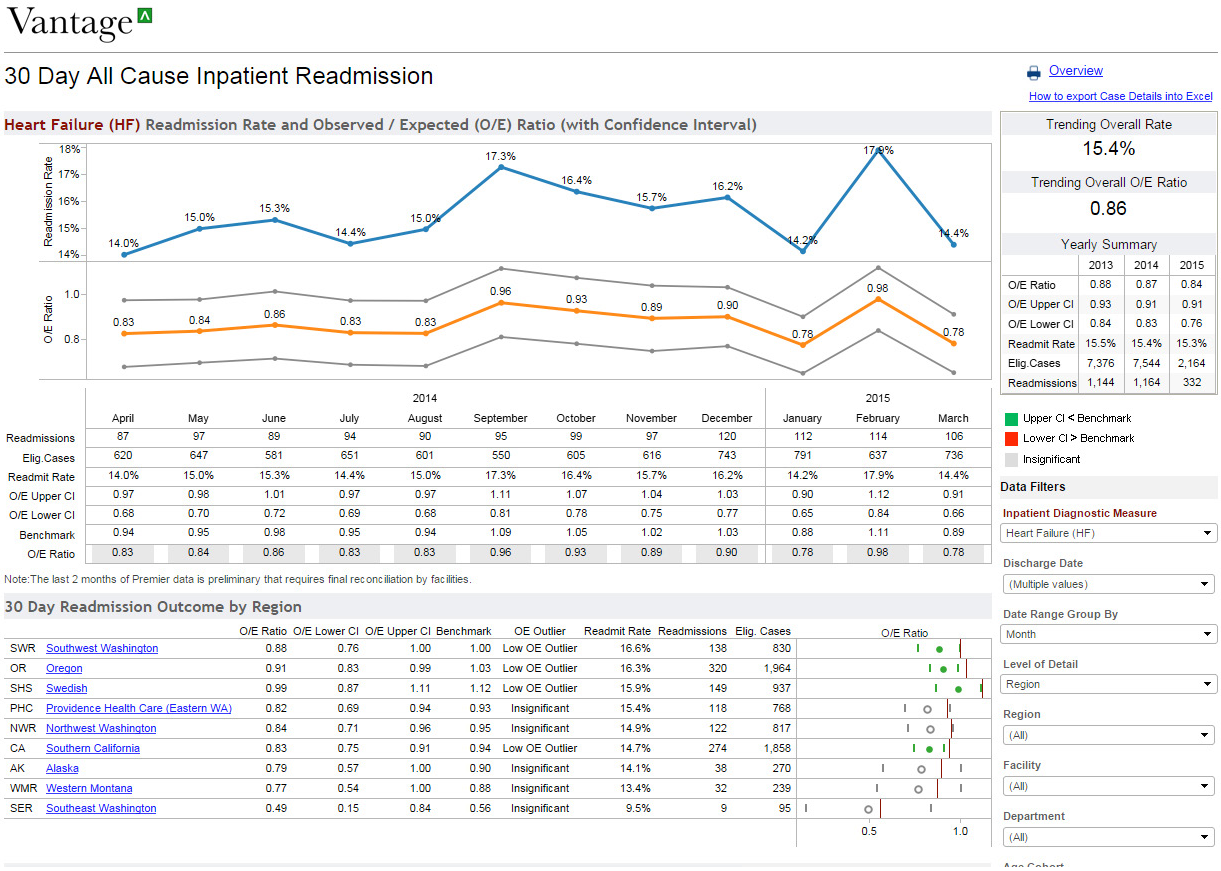
Providence Health, the second largest healthcare system in the US, implemented a self-service analytics program called Vantage for better operational reporting. Vantage is a series of dashboards built with data from EPIC, Lawson, Press Ganey, and other hospital systems. It includes 40 visual and interactive reports that serve more than 20,000 self-service users.

These reports are standardized across financial, operational, supply chain, and clinical functions (including physician scorecards), allowing executives to monitor the financial health of the enterprise, operational supply chain efficiencies, and benchmark physician utilization and performance.

Because Vantage is a self-service model, Providence Health users adopted the platform quickly. Physician productivity increased by eight percent in 12 months. Providence Health also saw a sharp increase in life-saving cancer screenings and a significant decrease in 30-day patient readmission rates.

> If our doctors don't have the data, how are they going to change things? They need to know what patients need to be screened. We started out by showing them the metrics, and then they wanted more. We can give them patient detail reporting for every physician who wants to look. That was the first time that our team got emotional. We are actually really saving lives by what we do with visual analytics.
>
> **MEGHAN BRANDABUR**
> PROGRAM ADMINISTRATOR FOR HEALTH INTELLIGENCE,
> PROVIDENCE HEALTH AND SERVICES

The best way to build adoption is to make the transition easy for users. Make the most of a self-service analytics strategy by giving users easy access to data, and the ability to ask and answer their own questions without the support of IT.



In this dashboard, Providence Health users can see and understand the 30-day readmission rates for their population health management. They can also drill down into the data to find root cause analysis at the hospital level.

Watch to learn how Swedish Medical Group, which recently merged with Providence Health, used self- service analytics to dramatically improve cancer-screening metrics.

2. Segment Your Population Data

Most healthcare providers are mandated by the Affordable Care Act to carry out a community risk assessment once every three years. Executing a Community Health Needs Assessment (CHNA) gives providers a complete view of their covered population in terms of risks and the associated costs.

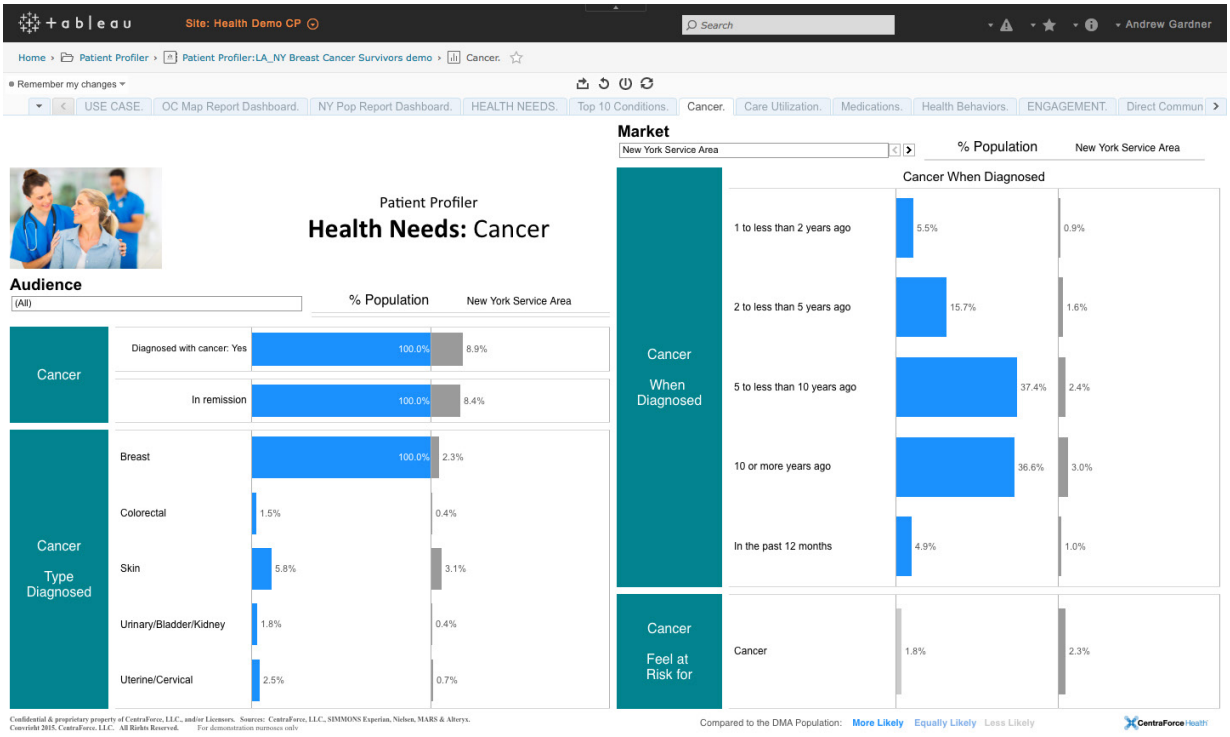
The Center for Disease Control (CDC) identifies and recommends analyzing population health with 42 specific metrics in order to depict an accurate blueprint of the population or community being served.

Segmenting your data across these 42 factors will enable understanding of your organization's population health based on risks and the associated costs. The findings can help organizations deliver the highest quality of care at the lowest cost.

Centra Force, an organization specializing in population health intelligence and community health assessments, uses data segmentation and visualization to quantify populations by categories like disease types and payer types.

> Having an agreed upon set of metrics can galvanize partners to work together to improve community health.
>
> THE CENTER FOR DISEASE CONTROL AND PREVENTION

Providers and payers can use this segmented data to discover deep insights on specific sub-populations stratified by behavioral, attitudinal, demographic, geographical, diseases, and provider characteristics.



This dashboard is an example of a community health needs assessment. The data is segmented to identify female patients at risk for breast cancer within a certain population, and is used to monitor the need for proactive intervention.

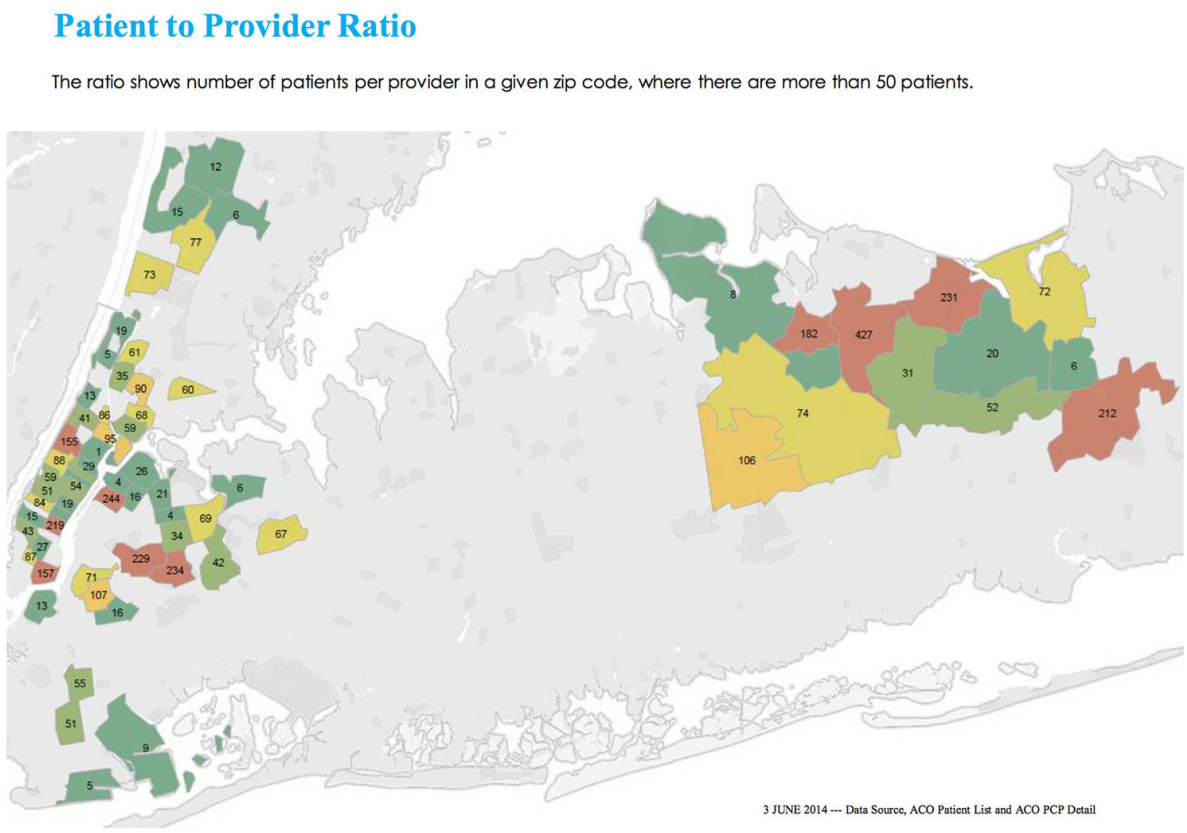
3. Understand Your Risks

Population health management allows providers to understand risk profiles of populations and various sub-segments of each population.

Once hospital providers understand each segment's risk, they can proactively identify the most vulnerable patients. They can then direct resources to intervene and improve outcomes while managing the associated costs.

With machine learning and advanced predictive analytics algorithms, software can visualize complex models to predict risk at both an aggregate population level, and at a discrete patient level.

Mount Sinai Medical Center in New York City manages risk by analyzing its patient-to-provider ratios as a basis for understanding the levels of service required for each of its geographical patient populations.



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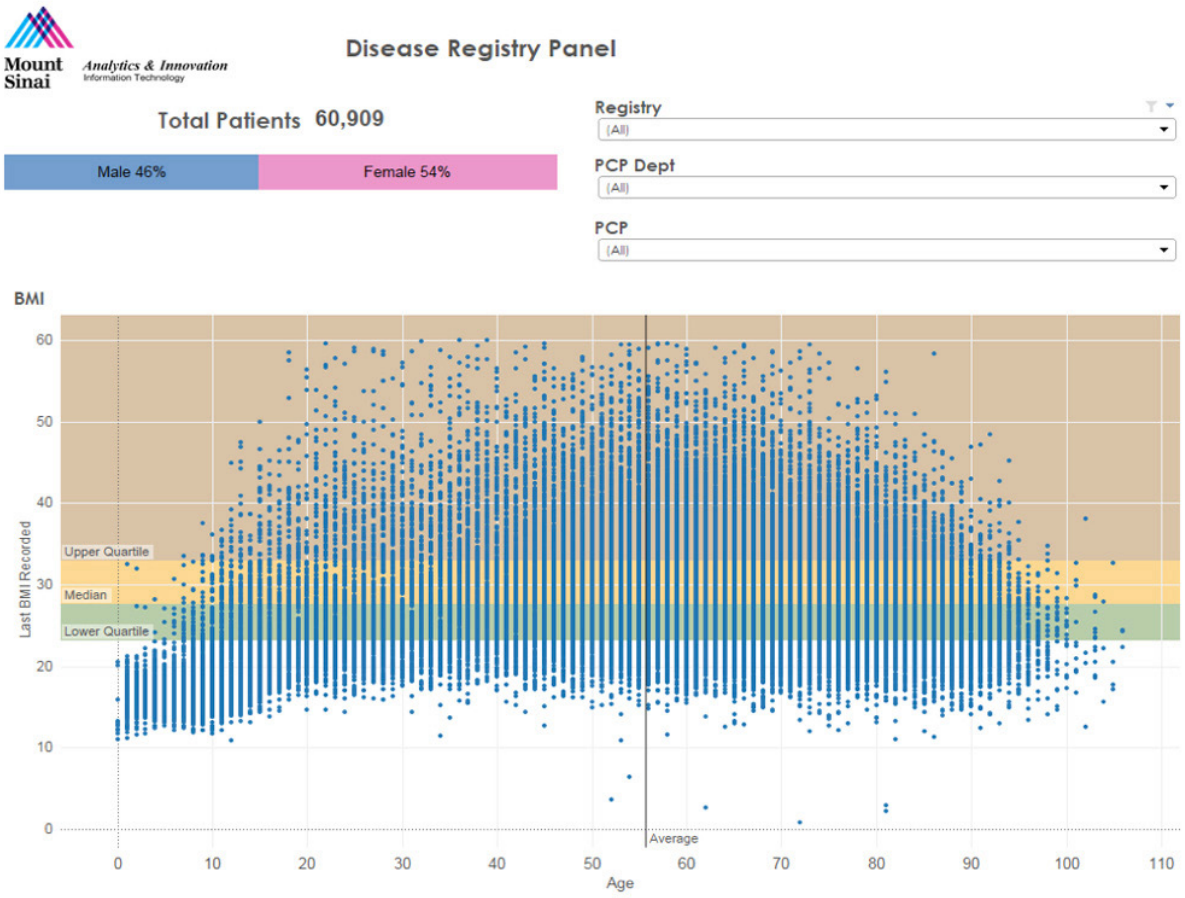
Mt. Sinai also uses data to identify primary care practices for potential acquisition as well as new locations to build out their next hospital facilities. To drive their strategy, they aggregate data from multiple healthcare IT (HIT) systems into a single, interactive dashboard.

The medical center also uses data from its electronic health records system to visualize disease registries with the ability to monitor and track performance against metrics.

Using public data like blood pressure and BMI data, Mount Sinai can also craft predictive analytics algorithms to stratify patients based on their risk of specific diseases for care coordination and risk-driven intervention.



This dashboard harnesses standard disease registry data to track against PHM risk factors like body mass index and blood pressure.

4. Proactively Manage Patient Relationships

For improved population health, care teams must build strong relationships with patients, both online and offline. These interactions can foster medication compliance and better preventive care.

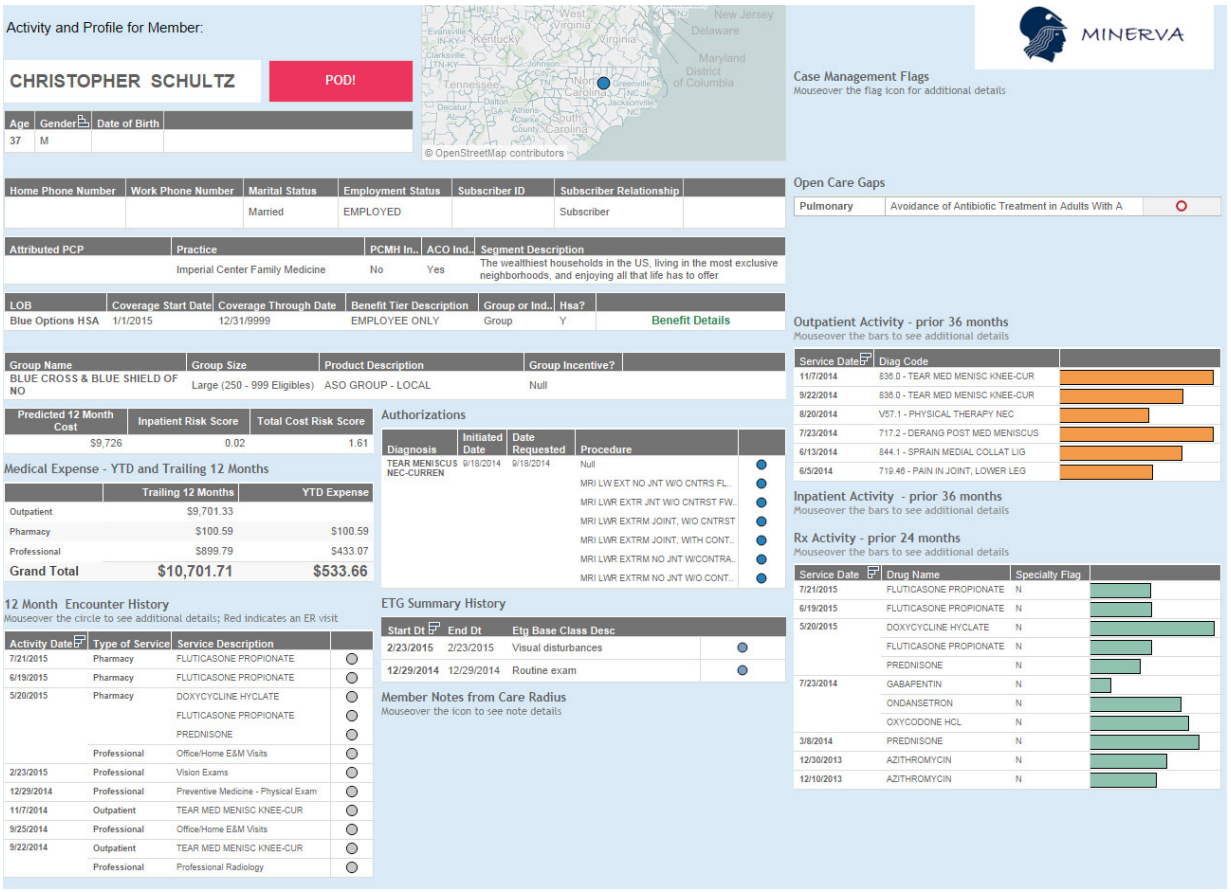
The members of these care teams—physicians, nurses, technicians, physician assistants, and social workers—must collaborate to optimize the quality and level of services offered.

A successful, collaborative approach toward patient relationships will need to combine an electronic registry (drawing upon clinical data from EHRs and other clinical systems) and patient portals to ensure optimal patient engagement.

Data can be leveraged to improve patient communications. Automated, data-driven communications—including outbound calls, secure text messaging, and emails—make it easier to to ensure regular engagement with care teams and doctors.
Blue Cross and Blue Shield of North Carolina manages patient relationships by incorporating an all-inclusive view of the patient dashboard for case managers. The solution, aptly named Minerva, was built from prototype to productized solution in 90 days.

Watch this webinar to learn how Blue Cross and Blue Shield deployed self-service visual analytics to proactively manage patient relationships and population health.

The Minerva dashboard aggregates patient data with multiple metrics like demographics, benefits, risk information, claims history, program enrollments, and care gaps from 13 disparate data sources. The nurse case manager who previously invested 15 to 30 minutes to prepare for an initial call with a member can now access this data in seconds from the dashboard.



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Conclusion

The population health management care model continues to evolve, requiring healthcare organizations to lean in to their data, and refine their practices as needed.

With a modern analytics platform that enables healthcare organizations to obtain actionable insights from population data, healthcare organizations will be able to provide better patient outcomes, while leveraging powerful data insights to lower costs and improve risk management.

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