The healthcare environment is changing and healthcare organizations have challenging decisions to make. With the dramatic changes in the healthcare industry, organizations are moving away from volume based care models to value based care models. As a result, risks are shifting from traditional payers to an environment where payers and physicians are sharing risks together. Accountable Care Organizations (ACOs) are on the forefront of these challenges, striving to achieve the industry’s "Triple Aim" objectives.

The “Triple Aim”
The IHI Triple Aim\(^1\) framework, developed by the Institute for Healthcare Improvement (“IHI”), describes the approach to optimizing health system performance. It is IHI’s belief that new designs must be developed to simultaneously pursue three dimensions, which they call the “Triple Aim”:

• Improving the patient experience of care (including quality and satisfaction);
• Improving the health of populations; and
• Reducing the per capita cost of health care.\(^1\)

Organizations should focus on eliminating inefficiencies and lowering costs while focusing on improving quality, safety, transparency and patient satisfaction in order to move to a value based care model. To be successful in this environment, ACOs will need to respond to the Triple Aim drivers by taking both offensive and defensive strategic positions. Data, information and analytics are at the center of both of these positions, and are critical to overcoming the struggles faced by ACOs.

This paper, as part of Deloitte’s series on ACO Analytics, illustrates how analytics can address the two most critical issues facing ACOs:

- Enabling Population Health Management
- Ensuring Safety and Quality Reporting Compliance

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**What’s at stake?**

**Level-setting**

**Overview**

The healthcare environment is changing and healthcare organizations have challenging decisions to make. With the dramatic changes in the healthcare industry, organizations are moving away from volume based care models to value based care models. As a result, risks are shifting from traditional payers to an environment where payers and physicians are sharing risks together. Accountable Care Organizations (ACOs) are on the forefront of these challenges, striving to achieve the industry’s “Triple Aim” objectives.

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**Instant Insights**

Solving your most pressing business challenges starts with knowing the landscape. Instant Insights offers you a digest of vital knowledge and practical steps you can consider now.
Our take

Enabling Population Health Management through Consumer Segmentation and Risk Stratification

Spotting Gaps in Care and Delivery
Over the last two decades, companies have invested heavily in origination and servicing systems to streamline their processes. The result was a significant increase in the availability of organized data, along with a shift in focus towards converting this data into actionable information. In the past, discussions between payers and providers revolved around the accuracy and timeliness of the data. It was virtually impossible for the providers to consolidate this disparate data to measure their performance.

Today, things are very different.
Analytics engines can now quickly combine data from disparate systems and generate a holistic 360 degree view of patients. This view enables the ACO to identify trends and spot gaps in care coordination and delivery, enabling focused healthcare delivery along with significant healthcare cost savings.

Enabling Population Health Management
Chronic illness accounts for 75 percent of US Health spending\(^1\). ACOs need to manage population health by preventing disease progression and driving appropriate utilization. Successful ACOs make effective use of analytics to measure patient experience and satisfaction on a population-wide basis and aggregates the information required to demonstrate better outcomes and qualify for bundled payments.

Consumer Segmentation
Descriptive Analytics looks at data over time to identify trends, spot gaps in population health and improve patient outcomes. Populations can be segmented by applying filters to the entire population: by payer, activity center, provider, health condition (e.g. diabetes), and care gaps.

Risk Stratification
Predictive Analytics leverages modeling tools to identify the subpopulations most at risk. An advanced rules engine integrates data with evidence-based guidelines to demonstrate the healthcare system’s ability to identify various segments of its patient population. A Population Health Management dashboard can then be used to identify the prevalence of health conditions by provider or site, and evaluate provider and practice performance. Based on the risk stratification, ACOs will be able to calculate the return on investment (ROI) for population health management and wellness programs.

Enabling Safety and Quality Reporting
Analytics enables quality reporting and compliance for the organization. Reporting capabilities and detailed metrics are required to operate, manage and measure the performance of an ACO, as well as measure the quality and compliance metrics for CMS shared savings.

Analytics can also enable standardization of reporting across provider organizations, creating both regional and national benchmarks for comparison.

Analytics will help ACOs to support the reporting requirements as illustrated below:

- Successful ACOs will have the capacity to generate and analyze meaningful reports, incorporating CMS data as well as ACO internal data (such as lab values or clinical information drawn from electronic medical records).
- Reports will provide valuable information allowing ACOs to track performance and identify areas for improvement.
- ACOs have to collect and submit quality data to CMS and private payers.

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**ACO Information Drivers**

- Clinical Excellence
- Population Health Management
- Operation Excellence
- ACO Information Drivers
- Regulatory Compliance
- Financial Excellence
- Service Excellence
The path forward

What does this mean for ACOs?

Improved Care Management
In today’s world, care delivery is fragmented; primary care physicians focus on preventive or routine interventions, specialists address a variety of medical problems, and hospitals deal with episodes of acute care. ACOs that plan and deliver the full continuum of care across these fragmented caregivers will be well positioned to capture and share greater levels of revenue. Some of the obstacles facing organizational leadership in this context include:

- Costs related to infrastructure and information technology (IT)
- Lack of central referral capabilities
- Lack of availability of well-trained care coordinators
- Resistance from physicians and hospitals to move into risk sharing agreements and a value based purchasing environment

Improved Risk Management
ACOs are a fundamental change to the typical provider/plan model, as the ACO assumes most, if not all, risks requiring ACOs to understand the patients they serve. ACOs that save money while also meeting quality targets will keep a larger portion of the savings. If an ACO is unable to save money, it could be stuck with the costs of investments made to improve care, such as adding new care managers. Additionally, an ACO will eventually have to pay a penalty if it doesn’t meet performance and savings benchmarks.

Currently, few ACOs understand the risk they are taking. In order to better understand this risk, ACOs need to generate insights from the data they have readily available to better understand the patients and to determine how providers can help an ACO improve quality of treatment and lower costs. Measuring the success factor for ACOs includes measuring medical costs, risk scoring, and out-of-network utilization.

Better Payer Partnerships
Health Plans are now incentivizing ACOs using targeted PMPM payments for important clinical interventions occurring outside of a patient visit. These payments provide physicians with predictable cash flow that enables them to invest in the improvement of their practice. This shared savings incentive program allows ACOs to earn a portion of the savings accrued as long as ACOs meet the programs’ quality measures.

ACOs can use analytics to further partner the relationships with health plans by measuring Key Performance Indicators (KPI) such as denial rates, take back rates, claim and payment volumes, and outstanding receivables. Analytics is also very effective in identifying fraud and abuse, performing cost forecasting and care utilization analysis.

More Effective Cost Management
ACOs are moving towards calculating the cost of care by quantifying the costs of common procedures like x-rays, colonoscopy screenings, and maternity care. In the near future, patients will be able to see the real cost and profit of healthcare services and the patient will be able to make a determination to choose the appropriate service. Price transparency will be the key to preventing over-utilization of expensive and unnecessary services.

ACOs and providers must partner with hospitals to reduce both utilization and unit cost of services. The common belief is that revenue will be lost from reducing utilization of services. However, lost revenue from reducing unit cost and decreasing over-utilization of services can be recouped from the shared savings agreements with payers. The message here is simple: effective use of analytics is required to navigate through the mountains of data to identify where savings are justified without compromising the quality of care. Analytics enables the ACO to keep tabs on their costs and expenses and helps to sustain the competitive advantage for the ACO in this difficult environment.

Analytics Improve Accountability and Organizational Effectiveness
Participating in an integrated, patient-centric care delivery ecosystem is a paradigm shift for many of today’s independent-minded physicians. In the new healthcare world, healthcare professionals will be accountable for the outcomes of patients. A fully aligned accountable care organization requires a degree of trust in which physicians and administrators see each other as “co-owners”, working together to deliver the most effective care and experience to patients. Physician readiness for this transition to shared risk arrangements requires increased physician leadership and effective engagement to align provider, clinical, financial and administrative goals and incentives. Key factors for accountability and organizational effectiveness include:

- Effective governance system of accountability
- Enabling decision making by the physician leadership
- Effective use of performance measures to make clinical and business decisions
- Ability to change direction when necessary

Information management and analytics enables insights across business, clinical, operational, regulatory and financial domains. These insights drive ACOs towards overall organizational excellence by providing visibility to the measures and trends leading to better performance.
Analytics in Action

A case study

The case study below highlights the impact of analytics for ACOs and how analytics can improve the overall health of the population and make significant cost savings.

Improving the Health Status of an ACO population

Consider the case of Larry, a 60 year old relatively healthy male. He is retired, married and lives at home with his spouse. Larry is slightly overweight and has a history of intermittent elevated blood pressure.

Enabling population health management by consumer segmentation and risk stratification

• ACO Clinical Informatics team leverages descriptive analytics to analyze EHR based clinical data; targets a cohort of members showing clinical indicators for risk of diabetes
• Cohort includes the following features: age 55 or over, hypertension, overweight or obese, low HDL and high triglycerides and family history of diabetes
• Larry was invited to participate in a screening event and wellness fair due to the above risk factors

Integrated patient view spotting gaps in care coordination and delivery

• Cohorts are invited to attend a screening event/wellness fair, which includes education on risk factors contributing to diabetes
• Biometric screening held at the event identifies a subset of participants who are pre-diabetic
• Larry is found to be pre-diabetic and is referred to his Primary Care Physician (PCP) to be evaluated

Patient centered intervention by Primary Care Physician (PCP) and Registered Nurse (RN)

• The PCP evaluates Larry and orders fasting glucose and other related blood work. Even though test results came up negative for diabetes, Larry was reported for pre-diabetes
• The PCP refers Larry to RN Case Manager, who provides in-office education on lifestyle changes including weight management. RN Case manager also set up a reminder in the system for a follow up visit in three months

Leverage patient portal

• Larry went home, creates an account via the ACO patient portal and views diabetes education, weight management and lifestyle modification lessons
• Larry records his weight and blood pressure readings on a weekly basis in the Patient Health Record (PHR) of ACO portal

Clear accountability of care by the PCP and RN

• The RN Case Manager follows up with Larry in 3 months (analytics triggered event)
• Larry reports a six pound weight loss

Effective use of analytics enabled substantial cost savings

• The ACO Clinical Informatics team reviews claims, utilization, EHR and applicable PHR data at 6 months to identify evidence of change in the clinical indicators for the original cohort
• ACO clinical informatics team realized substantial improvement in clinical indicators for diabetes and thus gained substantial cost savings
The Bottom Line

Analytics are critical for ACOs to enable population health management by identifying the subpopulations that are most “at risk” and devising proactive strategies to ensure that quality care is delivered. Analytics not only enables ACOs to define metrics required to measure, operate and manage an ACO but also to generate the quality and compliance reports required for CMS shared savings.

The healthcare field is moving from volume based care to value based care and without analytics, an ACO will be left behind with lower margins and lower quality of care.

Stay tuned for more on Larry in the next ‘Analytics for ACOs’ issue.

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