Executive Summary

Accountable Care Organizations (ACOs) are structured or designed to reduce the cost of healthcare by improving the quality of patient care through coordinated care delivery. ACOs bring healthcare providers together to show improvement in care quality and reduction in health care cost thereby enabling them to get incentives from the Centre for Medicare and Medicaid Services (CMS).

The two major challenges ACOs confront today are: managing the health for the defined population and reporting on quality and outcome measures to the CMS. These challenges are critical and are to be tackled to ensure success in the shared savings program.

Analytics on patient data from disparate systems will enable generation of real time alerts for preventive, chronic care, and CMS quality reporting and provides the recommended actions to improve the population’s health. Analytics can also help ACOs in predicting the population’s health and track the population’s health outcomes.

This white paper focuses primarily on explaining how analytics play a key role in the ACOs success. It provides insight on the major challenges faced by ACOs and how they can overcome the challenges by using analytics and explains the consequences of not using analytics.
Accountable Care Organization

Accountable Care Organization (ACO) is a collection of hospitals, physicians, specialists, pharmacies, labs and other healthcare providers who agree to work together for providing coordinated, high quality, and efficient patient care at low cost. The objective of ACOs is to treat a defined population by optimizing cost and quality through integrated care.

ACOs get financial incentives based on pay for performance (P4P) depending on the prognosis of the patient’s health conditions. ACO formation leads to a major shift in care delivery model which encompasses a patient centred approach, episode care to population health, high quality treatment to patients, proactive care management, and predicting tomorrow’s utilizers.

Analytics

Today, analytics is the buzzword that has been used widely in the healthcare industry. Analytics comprises of a set of tools which help in the effective collaboration of different sets of data from disparate systems across organizations and converting it into meaningful and useful information. The meaningful information extracted from patient data can help ACOs to take the appropriate actions and enable the organization achieve its goals, for example, lowering the cost of providing care and improving quality.

Challenges of an Accountable Care Organization

An ACO helps healthcare providers to communicate better among themselves and share patient health information to improve health outcomes. Sharing of data across providers in ACO settings leads to an increase in the amount of data being accumulated for each patient. The two key challenges of an ACO are:

• Population Health Management

• Effective quality control measures
Population Health Management

Population Health Management (PHM) is a systematic way to improve health status of the population and minimize the need of expensive interventions such as unnecessary patient hospitalizations, re-admissions, expensive tests and procedures. To manage population health effectively, an organization should have the ability to track and monitor the health of individual patients. The focus of PHM is on high-risk patients who contribute to the majority of the healthcare costs. ACOs may run into major financial losses if they do not understand their patient population.

To accomplish effective PHM, the provider organizations should leverage patient claims, clinical, and administrative data. The core activities involved in PHM are:

- Identification and segmentation of the population at risk
- Monitoring and tracking patient health status
- Identifying gaps in patient care
Identification and Segmentation of the Population at Risk

Identification of the population at risk is critical for effective PHM. According to industry experts, 45% of the population have at least one chronic disease which accounts for more than 75% of the national health spending\(^1\). Analysts also predict that by 2023, improving prevention and disease management could save over $1 trillion\(^2\). Analytics helps to identify the patients who are likely to become sick in the near future by using past clinical, claims, and administrative data.

Clinical data of patients are close to real time. This data generally resides in an unstructured format in the form of progress notes and are exhaustive and not comprehensive despite having rich clinical data which the claims systems do not possess.

The claims data provides a broader perspective of the healthcare services provided to the patients. The disadvantage with this is - the data is not real-time and it generally dates back to several weeks or even months.

The administrative data such as scheduling and follow up visits provide insights


In an ACO setting, the patient data comes from disparate systems and includes both structured and unstructured data. Analytics helps to consolidate the data and create a data warehouse to mine patient data and identify the population at risk. On identifying the population at risk, the ACOs can proactively reach out to the patients who need preventive and chronic care to lower the cost of healthcare and enhance the ACOs financial incentives. Analytics helps to identify - patients today’s high utilizers, high risk patients, and patients with chronic disease.

Monitoring and Tracking Patient Care

On identifying the population at risk, the ACO’s care management team applies the appropriate care interventions and track the results for better outcomes. Analytics helps the organization to monitor the relevant care interventions provided based on the patients’ health conditions. Robust data analysis supports effective monitoring and tracking of the patients’ health conditions. For example, monitoring and tracking of how many diabetic patients have their blood sugar levels and blood pressure under control. Analytics support the generation of real time alerts and assist ACOs to assess the current performance of the patient health condition and monitor activities across the continuum of care to identify gaps in care.
Identifying Gaps in Patient Care

According to the Institute of Medicine’s ‘Crossing the Quality Chasm’ report, about 50% of Americans with chronic illness are not receiving the recommended care. By identifying and segmenting patients within the selected risk profiles, ACOs can focus their care provider resources on the highest risk patients. After identifying the gaps in patient care, it can alert the physicians and other care management resources to ensure that the care provided to patients is more consistent and evidence based. Analytics helps in identifying the gaps in care by comparing patient data against the organization’s quality guidelines and tracking how effectively the care team members are utilized and enabling better decision making to close the gaps in providing the appropriate care.
Quality Measures

Quality refers to providing the right care at the right time for the right reason as poor care quality increases healthcare spending. PHM helps to identify the population at risk and take the necessary actions to provide coordinated care across the continuum.

How does an ACO ensure that the actions / decisions taken to provide care for patients have improved the quality? This question can be answered only by measuring patient outcome.

To improve the quality of care, each ACO should define the guidelines for quality measurement which aligns with CMS ACO initiatives for quality measures.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Number of Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient/Caregiver Experience</td>
<td>7</td>
</tr>
<tr>
<td>Care Coordination/Patient Safety</td>
<td>6</td>
</tr>
<tr>
<td>Preventive Health</td>
<td>8</td>
</tr>
<tr>
<td>At-risk Population</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
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Analytics helps ACOs to answer the questions such as: how many patients have been screened for smoking and enrolled in the smoking cessation programs and how are they progressing?

ACOs can set the target to be achieved for each quality measure. Analytics can provide a bird’s eye view of the progress of each quality measure in the dashboard. The dashboard can depict the quality measures that have been achieved and not achieved. The ACO can analyze the performance and take decisions to accomplish the targeted quality measures across all domains.
Conclusion

Analytics can play a major role in achieving high quality medical care at low costs. Organizations that do not incorporate analytics will not be able to identify the population at risk for providing the appropriate preventive care, measure patients' health progress, provide evidence based care, and report on quality measures. In addition, it affects the profitability of these organizations. The foremost goal of any healthcare model is patient satisfaction and adopting cost-cutting measures without running into grey areas. If an ACO is not eligible to tap into the financial incentives from CMS through shared savings program, the impact on profitability can lead to bankruptcy and ending up / dissolving the ACO due to high healthcare costs.

Analytics provides clarity and transparency on the overall health of the patient population falling under the umbrella of the ACO. It also enables the ACO to predict the disease patterns or wellness trends. ACO success is defined by the generation of meaningful information from the efficient analytics used on the past data available with the provider organizations.

About the Author

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