How Has the Accountable Care Organization Impact the Quality of Care?

A graduate project submitted in partial fulfillment of the requirements
For the degree of Master of Public Administration,
Health Administration

By
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Abstract

How has the Accountable Care Organization Impact the Quality of Care?

By

Karissa Carbajal

Master of Public Administration, Health Administration

Accountable Care Organizations (ACOs) are designed to accomplish the triple aim of advancing the population's health and enhancing the quality of treatment for patients while lowering the per-person cost of healthcare. This research was designed to critically review the effects of the ACOs on the quality of care. This study was a qualitative analysis of archival data from peer-reviewed journal articles. The three academic databases, JSTOR, Google Scholar, and PubMed, were searched to identify relevant literature. The key phrases used for research were ACA, ACO, ACOs and California, ACO and quality of care, ACO and quality of care and California, ACO and innovation payment models. Non-peer-reviewed articles through
government sites such as Kaiser Family Foundation (KFF), Centers for Medicare and Medicaid Services (CMS), and non-government sites such as the New York Times were used to receive the background of the ACOs models. The literature reviews evaluated the outcomes of the different ACO payment models that are most effective in providing cost savings and quality improvement. Specifically, the Pioneer ACOs, Medicare Shared Savings Program ACOs (MSSP ACOs), Advance Payment ACOs, ACO Investment Model (AIM), and Next Generation ACOs (NGACO) were examined, and it was observed that they have decreased the overall annual spending and improved healthcare quality. The MSSP ACOs have been the longest active ACOs compared to the others, and they have been able to service all types of communities, especially the rural and underserved populations. In addition, the MSSP ACOs incentivize their participants to accomplish their benchmarks, which has shown that the policymakers should incentivize all organizations to join ACOs to help their communities receive adequate care and reduce costs. Of note, selected states that chose to integrate ACO models saw positive improvements that included reducing costs and enhanced quality of care. Overall, this study verified that ACOs positively impacted reducing cost and quality of care.
Introduction

In 2020, national health spending increased 9.7%, totaling $4.1 trillion. The increase was primarily driven by federal spending during the COVID-19 pandemic (Wilson, 2022). An analysis of the data identified six waste-spending categories: 1) administrative complexity, 2) fraud and abuse, 3) pricing failure, 4) overtreatment/low-value care, 5) failure of care coordination, and 6) failure of care delivery (Shrank et al., 2019). The waste-spending resulted from heavy reliance on the Fee-For-Service (FFS) model in healthcare, which pays for individual encounters, procedures, and services through reimbursement. It results in little integration with patients, physicians, and specialists and does not give physicians incentives, which creates more spending (Hartman et al., 2015). The value-based care model would benefit from replacing the fee-for-service model since it would lead to quality care for individuals, improved well-being for the US population, and lower costs (CMS, 2019). The United States would profit from a new healthcare model to attain these objectives of better care for the individual, more excellent health for the US population, and lower costs.

On March 23, 2010, President Barack Obama signed the Affordable Care Act (ACA). The ACA was designed to decrease uninsured Americans, providing them with health insurance and affordable healthcare. It improved health outcomes and the healthcare system's performance (Feldman et al., 2015). Furthermore, Medicare spending needed to be restructured. Part of the purpose of the ACA was to figure out how Medicare patients could still receive adequate care at a low cost. The utilization of ACOs to enhance patient safety and quality of treatment while lowering healthcare costs in Medicare was made legal by the Patient Protection and ACA on January 1, 2012. This literature review examines the impact of the ACOs on the US healthcare system. The researcher focused on reducing cost, quality of care, and the population's health.
Background

Based on comparative healthcare system performance, the United States is the lowest among 11 developed countries (Schneider et al., 2021). The United States has multiple barriers to providing sufficient care to its population. Some of these barriers are the high cost of care for doctor's visits and procedures, lack of transparency between the patient and physician, and limited accessibility of care due to lack of appointments. According to WHO (World Health Organization, 2021), the possibility that intended health outcomes will occur due to individual and population health interventions is called quality of care. It is essential to carefully assess the value of care and health services since the healthcare system should be dedicated to ensuring health for all.

Acknowledging and integrating this definition into practice can raise healthcare quality while lowering costs. The entire medical staff for the patient must communicate to improve the quality of care. In addition, doctors and other healthcare professionals must consider a patient's entire medical when creating a treatment plan and consider the history and how it will work with existing treatment programs implemented by other doctors for various health issues. Lastly, doctors and other healthcare professionals communicate and collaborate to improve patient care. Patients are less likely to receive unnecessary medical tests or services.

Additionally, the government must hold healthcare providers accountable for this practice. Doctors and other healthcare professionals collaborate with their patients to manage their entire health in an accountable care relationship. Since the ACA approved using ACOs to enhance the safety and quality of care and lower healthcare costs for Medicare patients, they are now considering their patients' personal health objectives and values (Centers for Medicare &
The ACOs must find ways to accomplish those goals for the US population.

**What are the ACOs?**

The ACOs are hospitals, physicians, and other healthcare professionals who came together willingly to provide Medicare recipients with managed, quality care (McWilliams et al., 2016). The ACOs focused on the triple aim: increasing the quality of care for each patient, enhancing population health, and lowering the cost of care per person for the population (Berwick et al., 2018). In order to ensure that patients receive the proper care at the proper time, cut excessive duplication of services, and avoid medical errors, the ACOs also rely on coordinated care. An ACO will receive a share of the savings it creates for the Medicare program if it successfully delivers high-quality care while lowering healthcare costs (Robinson et al., 2010).

The ACOs promote accountable care at the organizational level, support financial responsibility for a population's healthcare requirements, and oversee the population's treatment along the healthcare continuum. ACOs also coordinate healthcare providers' efforts and use cutting-edge health information technology to save costs and raise standards (Tu et al., 2015).

**Health Maintenance Organization Act**

Kaiser Permanente started a medical care program in California in the 1930s as a private company in the government during the Great Depression, before there were the ACOs. Henry K. Kaiser was a co-founder of Kaiser Permanente along with its medical pioneer Sidney R. Garfield. They recognized an opportunity when they learned how many thousands of men were working to construct the Colorado River aqueduct. Despite the financial difficulties, Garfield and Kaiser established Contractors General Hospital six miles outside a little town called Desert Center. They began providing medical care to sick and injured employees there. Because not all
employees had insurance, Dr. Garfield struggled to convince the insurance companies to pay his bills immediately. As a result of Dr. Garfield's refusal to turn away any sick or injured worker, he frequently went unpaid for his services. The hospital's spending quickly outpaced its revenue (Debley, 2011).

In order to improve the overall delivery of high-quality treatment, Garfield and Kaiser developed a pre-payment healthcare system in 1945. This system divided the care expense among many patients and provided steady funding for medical care, clinical research, and teaching (Cushing, 2011). Best practices for disease and injury prevention were motivated by pre-payment. To reduce the financial obstacles, patients seek treatment early in their sickness. They received care to stop their sickness from worsening, which promoted preventative care, early disease identification, and the development of lifestyle medicine to preserve health and improve quality of life.

In the late 1960s, healthcare costs increased. However, during that time, Kaiser Permanente demonstrated affordability and was recognized as the best health plan model for the groundbreaking Health Maintenance Organization Act. In 1973, President Richard Nixon passed the Health Maintenance Organization Act. Three guidelines characterize Health Maintenance Organization (HMO) to standardize clinical processes in order to help reduce healthcare costs and outcomes. Additionally, a gatekeeping practice, which controlled costs, required the patients to request a referral from their primary physician before seeing a specialist. Lastly, payment ensures a set monthly payment per patient, which was utilized to move some financial risk from HMOs to healthcare providers. The HMO Act was meant to be implemented across the nation by President Nixon.
In California, Kaiser Permanente helped to shape the state's healthcare industry by growing to be the country's largest HMO (Ginsburg, 2009). At that moment, the Delegated Model was incorporated into California's healthcare system. The Delegated Model provided valuable healthcare services to Medi-Cal Managed Care, Medicare Advantage, and Commercial HMO members (Ehnes, 2018). With this model, insurers gave a group of doctors specific duties like provider credentialing, utilization management, and managing chronic diseases. While paying doctors fee-for-service, capitation did come with some financial hazards.

The Delegated Model became successful in California due to lowering the cost of HMOs. California's cost trends were lower than the rest of the nation in 1991, falling from 100% of the national average to 88% in 2004. Another reason the Delegated Model worked well in California is because physicians enjoyed the flexibility of health plans' utilization management. Financially rewarding doctors for providing adequate care and engaging in behaviors they deemed excellent medical practices, such as more explicitly controlling chronic disease and avoiding wasteful utilization, gave doctors an additional incentive (Ginsburg, 2009).

As the healthcare market was evolving, multiple issues caused the use of the Delegated Model to decline. The first was due to the healthcare market shifting from HMO to Preferred Provider Organization (PPO); the Delegated Model was only used in HMO. The second reason was that national health plans were regulating their approaches throughout the country and were less inclined to spend on different approaches in California. Lastly, physicians did not think the model was effective because it increased physician influence on health plans. According to data, the percentage of people with employer-based coverage who were enrolled in HMOs or HMO/point of service (POS) products decreased from 45% in 2002 to 32% in 2008; California
had a higher enrollment in HMO/POS products, but this has decreased over the same period from 70% to 63% (Ginsburg, 2009).

Policymakers considered integrating capitation into the regular Medicare program through ACOs, where physicians would bear some of the cost per beneficiary and quality of care-related responsibility. Since both HMOs and ACOs have the same objectives of lowering costs and providing high-quality care. The ACOs would adopt a shared-savings model that incorporates capitated incentives by continuing to pay providers fee-for-service and bonuses for enhanced efficiency and quality. By reducing costs and enhancing care quality, providers in an ACO can increase incentive payments. HMOs attempt to control costs by establishing fixed rates for treatments, which may persuade providers to decrease patient care in order to keep within the budgetary limit. (RevCycleIntelligence, 2019).

**Figure 1:** HMO Share Market (2009) and ACO Enrollment (2014) in California Counties
Figure 1 shows that the number of ACOs in a county is positively correlated with the HMO share of the marketplace. The ACOs benefit HMOs and represent a way for providers not in an HMO to capture some of the shared savings resulting from innovative care processes that reduce providers' costs (Berkeley Healthcare Forum, 2015).

While the Delegated Model incorporated the ACOs in its practice. In 2009, Kaiser was incorporated into the ACOs as well. To be able to expand their services to the Medicare and Medicaid population. The ACOs have successfully delivered high-quality care, effectively spent healthcare dollars, and will share in the savings they achieve for Medicare. Bezaitis (2014) observed that two organizations exceeding their spending targets had to refund money to Medicare. Meanwhile, 40% of the 32 organizations taking part in the Pioneer ACO program in the first year earned a share of savings.
Methodology

This study is a qualitative analysis of archival data from peer-reviewed journal articles. The three academic databases, JSTOR, Google Scholar, and PubMed, were searched to identify relevant literature. The search keyword terms were "ACA," "ACO," "ACO AND California," ACO AND quality of care," ACO AND quality of care AND California," and "ACO AND innovation payment models." The following search filters were added to refine the results: English language, academic journal publication, peer-reviewed, and published between December 2009 and January 2022. JSTOR initially returned 30, Google Scholar returned 83, and PubMed returned 40 search results. All articles were reviewed. Articles regarding reducing emergency department visits, improving preventive care, case management, and chronic management outcomes were excluded based on the title and abstract. Based on the title review, articles about specific races, disparities, and diseases were also excluded from the research. 40. The qualitative analysis reviewed all articles' abstracts and identified four categories. The four categories are population health, cost reduction, quality of treatment, and payment approaches. Also, non-peer-reviewed articles through government sites such as Kaiser Family Foundation (KFF) and Centers for Medicare and Medicaid Services (CMS) were used to receive the background of the models. In addition, The New York Times was to review supplemental information.
The Innovation Center

The ACA created the CMS Innovation Center to test different new payments and modes of service delivery that cut expenses while sustaining and improving the level of care. To help reform the Medicare, Medicaid, and CHIP systems to provide better treatment for people, improve population health, and reduce expenditure growth by improving things for Medicare beneficiaries. The five different models of ACO are: 1) Pioneer ACO, 2) Medicare Shared Savings Program ACO (MSSP ACO), 3) Advance Payment ACOs, 4) Next Generation ACOs (NGACO), and 5) ACO Investment Model (AIM). Each ACOs has special incentives to improve the level of care and save expenses. This review discussed when each model was established and how the model impacted the cost and quality of care.

Pioneer ACOs

In 2012, CMS implemented the Pioneer ACOs model. The way this model works is that the organizations' benchmark and quality score will determine if they receive the reward. The collaborating organizations' financial risk and return were included in this model. 32 professional healthcare groups with various organizational structures from 18 states were present when this model was created. They engaged them in demonstrating ways to reduce FFS Medicare spending through care enhancement (McWilliams et al., 2015). The Pioneer ACO model was a strategy developed by the CMS Innovation Center to help organizations provide beneficiaries with better-coordinated care at a lower cost to Medicare (Centers for Medicare & Medicaid Services, 2021).

The Pioneer model surpassed CMS' actuarial estimate of total program savings of $87 million in the first year, producing savings of $147 million. For each of the 15 quality measures, most Pioneer ACOs surpassed Medicare FFS rates. The participating programs included 669,135 Medicare beneficiaries in year 1 (Pham et al., 2014). However, not all Pioneer ACOs participants
generated savings or found the model to be a sustainable fit for their organization. It resulted in nine ACOs transitioning to the Shared Savings Program. Another three organizations have withdrawn since they are mandatory to compensate CMS a fraction of their excess if Medicare expenditure exceeds their goal (Henry J Kaiser Family Foundation, 2018).

The Pioneer ACOs increased their effectiveness in all areas of the three-part goal of more excellent quality, better patient experience, and lower Medicare costs in the second year. The Pioneer ACOs had an average score of 84.0% in 2013 compared to 70.8% in 2012 (Katikaneni, 2014). The improvement across all quality measures was 14.8% (Center for Medicare & Medicaid Services, 2014). In addition, the average performance score improved in six of seven patient/caregiver experience ratings. The Pioneer ACOs generated more total program savings in the second performance year than in the first year. 17 out of 23 ACOs had positive or neutral financial performance, with 11 participants earning shared savings above their minimum savings rate, six generating savings but not exceeding their minimum savings rate, and six generating any losses (Centers for Medicare & Medicaid Services, 2016).

With all the success, this model had issues that the participants left the demonstration due to the quality metrics on which CMS partially bases pay. The CMS had promised to update the metrics and speed real-time data integration into quality metrics. However, CMS refused to delay the pay-for-performance phase, which the Pioneer ACOs requested (Wilson et al., 2020a). Furthermore, the Pioneer program incorporated disproportionate-share hospital payments in its benchmark, given that states have unevenly adopted the Affordable Care Act's Medicaid expansion (Diamond, 2014).

The Pioneer ACO continued to demonstrate its approach to other organizations as years went by; nearly ten of the 32 Pioneer ACOs dropped out of the demonstration. Five participants
dropped out of the program and moved to the MSSP ACOs. As many Pioneers, ACOs transitioned to the MSSP ACOs, and the Pioneer ACOs ended on December 31, 2016 (Centers for Medicare & Medicaid Services, 2021).

The Pioneer ACO model and MSSP ACOs Model aim to reduce cost and improve the quality of care. However, during the time, both models were active at the same time. In 2014, the Pioneer Model acted more effectively in quality of care compared to MSSP ACO. Nevertheless, MSSP ACO acted more effectively during that same year in reducing costs by -$291 million, whereas the Pioneer Model reduced costs by -$120 million, as shown in Table 1. In addition, the MSSP ACOs did not punish ACOs for failing to meet cost and performance goals compared to the Pioneer Model, which did punish their participants (Wilkerson, 2013). Subsequently, the Pioneer Model ended in 2016, and MSSP ACO became a permanent ACO program.
**Pioneer ACO Model**

Based on how much of their overall Medicare expenditure varied from a benchmark amount and how well they performed in terms of quality, all participating ACOs in the Pioneer ACO Model were subject to financial risk and reward.

**Quality of Care**

<table>
<thead>
<tr>
<th>Year</th>
<th>Quality (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>93%</td>
</tr>
<tr>
<td>2015</td>
<td>92%</td>
</tr>
<tr>
<td>2014</td>
<td>87%</td>
</tr>
<tr>
<td>2013</td>
<td>84.0%</td>
</tr>
<tr>
<td>2012</td>
<td>70.8%</td>
</tr>
</tbody>
</table>

**NET Medicare Spending vs. Benchmark**

<table>
<thead>
<tr>
<th>Year</th>
<th>Savings (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>-$61 M</td>
</tr>
<tr>
<td>2015</td>
<td>-$37 M</td>
</tr>
<tr>
<td>2014</td>
<td>-$120 M</td>
</tr>
<tr>
<td>2013</td>
<td>-$96 M</td>
</tr>
<tr>
<td>2012</td>
<td>-$92 M</td>
</tr>
</tbody>
</table>

The Pioneer model produced program savings totaling $147 million, more than CMS’ actuarial estimate of overall savings of $87 million in the first year.

**Financial Risk/Reward**

<table>
<thead>
<tr>
<th>Track</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>If quality scores are high enough, ACOs that reduce Medicare expenditure compared to a target can split the savings.</td>
</tr>
<tr>
<td>1+</td>
<td>ACOs can share in savings and losses.</td>
</tr>
<tr>
<td>2</td>
<td>ACOs can save.</td>
</tr>
<tr>
<td>3</td>
<td>ACOs can share in savings or losses.</td>
</tr>
</tbody>
</table>

**MSSP ACO**

The MSSP is the main Medicare ACO program. A long-term ACO program offers rewards for attaining or beyond quality and cost-saving targets. The MSSP program has several tracks, allowing ACOs to either share in savings and losses or save. Track 1, 1+, 2, and 3 are those.

**Quality of Care**

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**NET Medicare Spending vs. Benchmark**

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<thead>
<tr>
<th>Year</th>
<th>Savings (M)</th>
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</thead>
<tbody>
<tr>
<td>2016</td>
<td>-$652 M</td>
</tr>
<tr>
<td>2015</td>
<td>-$429 M</td>
</tr>
<tr>
<td>2014</td>
<td>-$291 M</td>
</tr>
<tr>
<td>2012-13</td>
<td>-$234 M</td>
</tr>
</tbody>
</table>

**Financial Risk/Reward**

Upside and Downside

Variied by MSSP track

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**Table 1: Side by Side Comparison of Pioneer Model and MSSP ACOs**

**Medicare Shared Savings Program ACOs**

The Physician Group Demonstration Project, which was initiated under the George W. Bush administration, served as the foundation for the Medicare Shared Savings Program. The Affordable Care Act has officially approved the MSSP. The MSSP ACOs program for conventional Medicare gives several options for ACOs to choose from since it is a permanent ACO program. That provides financial incentives for meeting or exceeding quality and cost standards. They are Track 1, 1+, 2, and 3.

- Track 1: If quality scores are high enough, ACOs that reduce Medicare expenditure compared to a target can split the savings.
• Track 1+: This emphasis on small practices and rural area hospitals. ACOs have lower downside risks but are considered for shared savings.

• Track 2: ACOs would owe CMS a fraction of their excess if spending surpasses their goal. However, they can obtain a large portion of shared savings.

• Track 3 is similar to Track 2, but ACOs can share higher savings.

The MSSP ACOs became the most extensive Medicare ACOs programs. Providers participating in this approach were allowed to spend towards a specific population of fee-for-service beneficiaries sufficiently below a financial benchmark. Large share-saving bonuses were then awarded to ACOs with higher performance on quality measures, unlike the Pioneer ACOs. Few ACOs participating in the MSSP ACOs approach were penalized for spending more than benchmarks because of downside risk. (McWilliams et al., 2016). The 2013 fiscal year saw the end of the 2012 ACOs performance period, and CMS has included them in the 2013 performance year file. The number of participants increased dramatically, with 106 new MSSP ACOs established in 2013 and 193 in 2014 (Kaufman et al., 2019).

Among the ACO models, MSSP ACOs are the most prevalent ACO model; over half had spending that was lower than their benchmark in 2016 (The Henry J. Kaiser Family Foundation, 2018). Although these ACOs saved $652 million in gross Medicare costs, CMS gave out more in shared savings bonuses to ACOs. The overall net cost to Medicare for MSSP ACOs was $39 million compared to their overall benchmark, even after CMS recovered around $9 million in shared losses from the 5% of MSSP ACOs that took on the risk. (Henry J. Kaiser Family Foundation, 2018).

The research was finished to confirm the quality and efficacy of the MSSP ACOs as they were still being used across the United States. The first four years of MSSP ACOs data were
evaluated in the study. It was discovered that there are four primary quality improvements: fall risk, pneumonia immunizations, depression and blood pressure screenings, and follow-up care. In the program's first three years, MSSP ACOs saw strong recipient growth linked to quality (Bleser et al., 2018). The average ACO faced higher initial PAC costs, which made it challenging to enhance quality, but these costs were later decreased. Hospitals now perform better in clinical care and preventative health measures for at-risk populations because of the MSSP ACOs. MSSP ACOs performed better on similar quality criteria than any regular Medicare providers. The majority of quality metrics for MSSP ACOs improved over time, with an overall average composite score of 95% in 2016, up from 92.5% in 2015 and 86.5% in 2014. (Henry J. Kaiser Family Foundation, 2018).

As the MSSP ACO continues to be a successful model. The MSSP ACO's main objectives are to improve population health, individual health, and spending growth. Therefore, MSSP ACOs has six different divisions, each focusing on different populations in the US. For instance, the Advance Payment model. This model focuses on smaller ACOs usually located in rural areas. Based on Table 2 shows that there is a significant difference in Medicare spending vs. the benchmark. Unfortunately, since the Advance Payment ACO only assisted the smaller ACOs, it was not easy to compare it to the other payment models. In addition, this model was only active for three years.
**Model Description**

The MSSP is the main Medicare ACO program. A long-term ACO program offers rewards for attaining or beyond quality and cost-saving targets. The MSSP program has several tracks, allowing ACOs to either share in savings and losses or save. Track 1, 1+, 2, and 3 are those.

The Advance-Payment ACO concept prioritized providing physician-based and rural providers with high-quality, coordinated care. After CMS reimbursed the advance payments, Advance Payment ACOs also received monthly population-based payments and had the opportunity to share in savings.

**Quality of Care Overall**

- MSSP ACO 2016: 95%
- 2015: 92%
- 2014: 86%

- Advance Payment ACO 2016: 94%
- 2015: 92%
- 2014: 87%

**Medicare Spending vs. Benchmark**

- MSSP ACO 2016: -$652 M
- 2015: -$429 M
- 2014: -$291 M
- 2012-2013: -$234 M

- Advance Payment ACO 2016: -$70 M
- 2015: -$112 M
- 2014: -$85 M
- 2012-2013: -$8.3 M

**Financial Risk/ Reward**

- MSSP ACO Upside: ACOs Participate in Medicare savings
- Downside: ACOs share Medicare’s losses

- Advance Payment ACO Varied by MSSP track

**TABLE 2: SIDE BY SIDE COMPARISON OF MSSP ACOs AND ADVANCE PAYMENT ACOs**

**Advance Payment ACOs**

The Advance-Payment ACO, which ran from 2012 to 2015, was created to give new ACOs upfront monthly payments for infrastructure investments in care coordination. The Advance Payments ACOs were meant to be repaid against payments from shared savings (Staloff et al., 2020). This model, which consisted of 36 MSSP ACOs, was created to make it easier for smaller ACOs with limited funds to join the MSSP ACOs. The Advance-Payment ACO concept prioritized providing physician-based and rural providers with high-quality, coordinated care. After CMS recovered the advance payments, Advance Payment ACOs also received monthly population-based payments and had the opportunity to participate in savings (The Henry J. Kaiser Family Foundation, 2018). When developing the Advance Payment ACO Model, CMS took into account comments received from stakeholders about the Shared Savings Program's proposed rule. The first advance payment model was made public in May 2011. Some providers voiced concern over their inability to acquire the funds required to invest in the
facilities and personnel necessary for care coordination. Smaller ACOs with fewer access to financing were intended to benefit from the Advance Payment ACO Model so they could participate in the Shared Savings Program.

Research shows that, the Advance Payment ACOs achieved overall net Medicare savings in the first four years, with their cumulative threshold of over two-thirds earning Medicare shared savings payments in 2016. However, an impartial assessor discovered that Advance Payment ACOs experienced more spending growth in 2014 compared to a controlled group of receivers. It was discovered that, on average, Advance Payment ACOs and other ACO groupings did not differ statistically on quality indicators. From 92% in 2015 and 87% in 2014, the overall average composite ratings for Advance Payment ACOs increased to 94% in 2016 (Henry J Kaiser Family Foundation, 2018).

Since the model is focused on rural areas and primary care, one of the concerns of this model is that the population is focused on small to medium-sized physician practices (Colla et al., 2016). As a result, it became a high cost to form the Advance Payment ACOs. The Advance Payment ACOs demonstration paid ACOs a large portion of their bonuses and shared savings to help the physician practices pay for setting up the ACO (Wilkerson, 2011). However, the model did not produce improvements in utilization or quality of care and significantly increased Medicare FFS spending. Towards the end of the third year of the participation agreement period, $30 million of the $68 million in advance payments given to the AP ACOs had not been recovered against shared savings (Center for Medicare & Medicaid Services, 2022). The Advance Payment ACO Model ended in 2015 and was split from the MSSP ACOs model.

The other Model that is under MSSP ACOs is the ACO Investment Model. This model is similar to the Advance Payment Model utilizing the pre-paid shared saving practice; however,
this model focuses on ACOs located in rural/underserved population that does not have significant hospitals in their area. This model significantly improved the quality of care from 87% in 2015 to 99% in 2016 shown in Table 3.

<table>
<thead>
<tr>
<th>Model Description</th>
<th>Advance Payment</th>
<th>ACO Investment Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Advance-Payment ACO concept prioritized providing physician-based and rural providers with high-quality, coordinated care. After CMS reimbursed the advance payments, Advance Payment ACOs also received monthly population-based payments and had the opportunity to share in savings.</td>
<td></td>
<td>The ACO Investment Model project targets the ACOs joining the MSSP. The Advance Payment concept was a foundation for the AIM, a pre-paid shared savings model.</td>
</tr>
<tr>
<td>Quality of Care Overall</td>
<td>2016: 94% 2015: 92% 2014: 87%</td>
<td>2016: 99% 2015: 87%</td>
</tr>
<tr>
<td>Financial Risk/Reward</td>
<td>Upside only</td>
<td>Upside only</td>
</tr>
</tbody>
</table>

TABLE 3: SIDE BY SIDE COMPARISON OF MSSP ACOs AND ACO INVESTMENT MODEL

**ACO Investment Model**

ACO Investment Model (AIM) gave upfront monthly payments and pre-paid shared savings during its operational period of 2015–2018 to encourage new MSSP ACOs to establish ACOs in rural and underserved areas. To induce current Shared Savings Program ACOs to switch to taking on more financial risk.

A study was completed after the first year this model was established. More than 75% of beneficiaries assigned to the AIM ACOs, located in 36 states, resided in rural areas, as opposed to only 24.1% of those assigned to the non-AIM MSSP (Trombley et al., 2019). Provider participation in the AIM was linked to a $131.0 million reduction in overall Medicare cost or a difference reduction of $28.21 per beneficiary per month compared to the comparator group. In
the same time frame, CMS made pre-payments totaling $76.2 million and compensated ACOs an extra $6.2 million in shared savings where shared savings outweighed pre-payments. The total net reduction was $48.6 million, or $10.46 per beneficiary per month after the figure accounted for $82.4 million in CMS spending (Haslam, 2019). Not only did the participants reduce costs, but AIM ACOs were also able to decrease the number of hospitalizations, and the use of institutional post-acute care contributed to the observed reduction in overall expenditure (Trombley et al., 2019).

The 45 AIM ACOs participants were in the MSSP in 2016; the average overall composite score was 99%, up from 87% in 2015 (Henry J. Kaiser Family Foundation, 2018). The participating AIM ACOs successfully reduced total Medicare spending, increasing the quality of care. AIM ACOs maintained performance on patient care experience and ACO-level preventive health and at-risk population health quality of care measures (Trombley, 2022). However, the majority of AIM ACOs stopped participating because some providers lacked sufficient access to funding to invest in the infrastructure required to execute population care management successfully. Therefore, resulted during the third performance year, many of the providers joined other MSSP ACOs in early 2019.

**Next Generation ACOs**

The CMS used a similar concept to the Pioneer model the Next Generation ACOs (NGACO) was created. This model focuses on ACOs experienced in coordinating care for large populations. Compared to what was possible under the MSSP, NGACO permitted provider groups to take on more significant levels of financial risk and reward. The first-year report for the Next Generation Accountable Care Organization demonstrates the model's potential.
According to the evaluation, the model's outcomes are superior to those of the Medicare Shared Savings Program's early years and on par with the early Pioneer ACOs (Stein, 2018).

Table 4 compares the Pioneer ACO model and Next Generation ACO Model. The Next Generation ACO model is a new revision of the Pioneer ACO. This model fixed the misfortunes that Pioneer ACO had occurred when Pioneer ACO was active.

<table>
<thead>
<tr>
<th>Model Description</th>
<th>Pioneer ACO Model</th>
<th>Next Generation ACO Model</th>
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<tbody>
<tr>
<td>Quality of Care Overall</td>
<td>Based on how much of their overall Medicare expenditure varied from a benchmark amount and how well they performed in terms of quality, all participating ACOs in the Pioneer ACO Model were subject to financial risk and reward.</td>
<td>The Pioneer model and the MSSP inspired the NGACO Model. This model program was developed for ACOs with experience in handling sizable patient populations. Provider groups could accept more significant financial risks and rewards than the Shared Savings Program would have allowed.</td>
</tr>
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| Medicare Spending vs. Benchmark (after shared savings/loss)                      | 2016: $61 M  
2015: $37 M  
2014: $120 M  
2013: $96 M  
2012: $92 M  
The Pioneer model produced program savings totaling $147 million, more than CMS‘ actuarial estimate of overall savings of $87 million in the first year. | 2016: -$48 M                                                                                                                                          |
| Financial Risk/ Reward                                                           | Upside: ACOs Share in savings with Medicare  
Downside: ACOs Share in losses with Medicare                                                                                                           | Upside and Downside                                                                                                                                                                                                    |

**Table 4: Side by Side Comparison of Pioneer ACO Model and Next Generation ACO Model**

The NGACOs had several characteristics that made their capacity to enroll populations more impressive. Some features include a prospective setting of financial benchmarks, prospective beneficiary alignment, and potential non-fee-for-service payment options to encourage infrastructure development or population-based care. Three optional benefit additions exempt beneficiaries from specific Medicare regulations regarding admissions to skilled nursing...
facilities, telehealth, and post-discharge home visits, as well as their obligations, to join Next Generation ACOs voluntarily. Should be given a reward for visiting a provider linked with NGACOs every year for illness (Lowell & Bertko, 2010).

In 2016, providers who joined the NGACOs model reduced Medicare spending for their beneficiaries by $100.08 million. The ACOs in the NGACOs generated a net savings of approximately six million dollars while maintaining the quality of care for beneficiaries for the 2016 performance year to Medicare (Landi, 2018). NGACOs reported using annual wellness visits to engage and anchor their recipients to their providers while simultaneously engaging them to document their care needs comprehensively. While there were no significant impacts on quality as measured in preventable hospitalizations and readmissions, there was a 16% rise in the use of annual wellness visits compared to the prior evaluation report. The use of wellness visits is a positive development in improving care coordination. Although, with the absence of reduced spending, the groundwork for future spending impacts if it is given time to develop (Micklos et al., 2021).

**ACO Challenges of Care Coordination**

ACOs faced many issues. For example, care coordination becomes more complicated when patients visit physicians outside the ACOs. Medicare fee-for-service patients visit two primary care doctors and five specialists annually across four different care venues. As a result, a primary care doctor who sees 257 Medicare patients would have to communicate with up to 229 doctors who work in 117 care facilities. Patients with several chronic diseases see even more specialists and contact their primary care doctors less frequently than other patients. Medicare enrollees with at least five chronic diseases make themselves or are typically referred to specialists in about 20% of cases (Blackstone & Fuhr 2016).
Because recipients must choose a primary care physician, patient care coordination is not a problem for Medicare Advantage HMOs. Care coordination is still a problem for the majority of health insurance users. In ACOs, primary care has been crucial. Primary care doctors are in insufficient supply, and their geographic distribution is unbalanced. Using non-physician professionals could help with the scarcity of doctors (Lewis et al., 2019).

Patient navigators, who plan follow-up visits, connect patients to local care resources, and certain ACOs have employed schedule appointments as non-clinical integrators. Visits to the emergency room and readmissions have decreased. Initial system costs would increase if patient navigators were added. However, a thorough analysis of the effects of replacing doctors with other providers revealed unfavorable outcomes, including declines in productivity, patient volume, and practice income (Blackstone & Fuhr, 2016).

Economic theory suggests that greater reliance on lower-cost physicians is appropriate to increase efficiency and reduce costs (Anderson & Chen 2019). Primary care physicians will have to spend less time on direct patient care to coordinate care. In a patient-centered medical home, it was calculated that primary care doctors would need to put in an extra 3.2 weeks of effort each year to coordinate care for patients receiving treatment from specialists for seven chronic illnesses.
Findings/Analysis

This research aimed to determine whether the ACOs impacted the quality of care. After analyzing the literature from peer-reviewed journals and public databases, it was clear that each Innovation Center model had unique concepts in how it would decrease healthcare costs and improve the level of care. Each model has its advantages and disadvantages.

Pioneer Model

Improvements in some patient experience and care quality metrics were seen in the Pioneer ACOs. This model benefited because more ACOs were linked to improved beneficiary satisfaction with timely care access, provider communication, and shared decision-making. Strong safeguards built into the Pioneer ACO Model ensure that patients will not encounter reductions in service accessibility or quality. The Pioneer ACO Model cut spending in its first two years. However, the savings decreased to -$37 million in 2015 and -$61 million in 2016, respectively, making little to no effect. (Henry J. Kaiser Family Foundation, 2018). Half of the Pioneer ACOs either stopped participating in any Medicare ACO or switched to the Shared Savings Program at the end of the initial three-year performance period. (Wilkerson, 2013). The other half either switched to become a Next Generation ACO because the requirements were too difficult to meet, or they continued using the Pioneer model through 2016, the model's final year.

Medicare Shared Savings Program ACOs

The MSSP ACO models are divisions of tracks and other ACO payment models that are part of this model. The overall MSSP ACOs, have shown that has made a significant difference in reducing costs and savings. Track 1 is the most prevalent type, which resulted in the MSSP ACOs having a net cost to Medicare compared to their total target. A third of MSSP ACOs generated sufficient funds in 2016 to qualify for MSSP expenses. As for the quality of care,
MSSP ACOs made a positive impact compared to traditional Medicare. MSSP ACOs improved across most quality measures over time, from 86% in 2014 to 95% in 2016 (Henry J. Kaiser Family Foundation, 2018). ACOs continued to achieve net savings compared to their benchmarks.

**Advance Payment ACOs**

This payment model is under MSSP ACOs. Advance Payment ACOs achieved overall net Medicare savings in the first four years. Two-thirds received Medicare shared savings payments in 2016 (Wilkerson, 2011). The advantage of this model is that it is a pre-paid payment that helped the participants invest in improving their organization and helped them discover ways to improve the quality of care. A disadvantage of this model is that it is only for providers based in rural areas; however, it is also an advantage because the rural population can receive quality care, improving their health (Henry J. Kaiser Family Foundation, 2018).

**ACO Investment Model**

This payment model is under MSSP ACOs as well. This model is focused on rural/underserved areas without a significant hospital providing care for their population. The advantage of this model is that it has held the health providers more accountable for services and had the health providers and physicians work together to coordinate care for the rural/underserved population (Trombley et al., 2019). The disadvantage to this model is that not all health providers and physicians are willing to follow the guidelines to improve the quality of care.

**Next Generation ACOs**

In this pandemic, the Next Generation ACO is the most advanced. The participants in this model have approved these standards for giving care. Such as post-discharge home visits,
telehealth, and the three-day skilled care facility guidelines. This model has helped improve the care for and engagement of their recipients (Micklos et al., 2021). The disadvantage of this model is that the participants must take more financial risks to obtain a greater reward.
Policy Implications

The US healthcare system has issues providing quality care and reducing healthcare costs. This study provides clear evidence that the US healthcare system needs improvement. The Patient Protection and Affordable Care Act (ACA), which aims to protect patients' rights and lower healthcare costs, approved the usage of ACOs. The Affordable Care Act established the CMS Innovation Center to investigate novel methods of providing healthcare to lower program costs while enhancing care quality. The new payment and service delivery models have positively impacted different organizations and communities. However, not all the states in the US integrated this practice. Policymakers may consider having organizations join in on one of the ACOs payment models, just as the policymaker created the ACA for everyone to receive affordable health insurance and access healthcare. The ACOs were developed to encourage greater efficiency by rewarding providers that control expenses. In ACOs, patient-centered care is prioritized over all other considerations to keep patients healthy and out of the hospital. Not only policymakers should incentivize organizations to join in, but healthcare administrators as well. The healthcare administrators know what is needed in their organizations and communities; thus, implementing one of the ACOs models can improve the quality of care and reduce costs. The models can be valuable for the US to improve the healthcare system.
Limitations

Due to the nature of this research question, this study was based on a qualitative analysis of archival data: this research utilized case studies and current databases for their analyses. The lack of diverse research tools, such as primary data collection and quantitative methods, limits the data and ability to conclude. This research is subject to several limitations. There was enough information on how the ACOs impacted the United States in its establishment's early years, but there was a massive gap in years of data for this research. Most of the literature research was from the early years when the ACOs were discovered and implemented. There were preliminary case studies between the years 2018-2022; this is specifically towards the ACO model that is still active.
Conclusion

This study confirmed that the ACOs could improve the quality of care. The US healthcare system has been impacted by the CMS’s innovative payment and delivery models introduced by the ACA. The Pioneer ACOs, MSSP ACOs, Advance Payment ACOs, ACO Investment Model, and Next Generation ACOs were the five models that made up the CMS innovation models. Each model has its distinctive principles and was able to help numerous organizations in the US with a high population of Medicare patients, particularly those residing in rural and underserved areas. Different incentives are built into each model to encourage collaboration among healthcare professionals. By setting up unique benchmarks, each organization must meet them to qualify for the incentive.

Three of the five models were unsuccessful after the study because the participants could not reach the benchmark. For instance, almost 10 of the 32 Pioneer ACOs left the demonstration because they did not meet the requirements to keep participating in that Model (Wilkerson, 2013). The Advanced Payment model was another failure, which resulted in a considerable rise in Medicare fee-for-service (FFS) spending but failed to enhance utilization or quality of care. Lastly, the ACO Investment Model is critical since certain providers currently do not have appropriate access to the funds to invest in the infrastructure required to deploy population care management properly.

However, MSSP ACOs and Next Generation ACOs are still flourishing and significantly impacting the US healthcare system. Given how the pandemic affects the quality of care for the US population, the US healthcare system has responded by integrating telehealth into its practice. As a result, it has enhanced the standard of care for patients and decreased the price of pointless surgeries and treatments.
It was shown that ACOs successfully achieved the three goals of enhancing US population health, enhancing patient care experience, and lowering healthcare per capita costs. Given the findings of this research, policymakers might consider mandating that all US organizations adopt the ACOs model.
References


