

# An Analysis of Medicare Accountable Care Organization Expense Reports

Catherine Hersey, MPH; J. Michael McWilliams, MD, PhD; Betty Fout, PhD; Matthew J. Trombley, PhD; and Lauren Scarpati, PhD

The Medicare Shared Savings Program (MSSP), one of the most prominent value-based payment models, has shown modest savings while improving performance on some quality measures.<sup>1,2</sup> However, little is known about the investments that accountable care organizations (ACOs) make to participate in the MSSP or the costs that they incur as a result of their efforts to lower spending and improve quality. Understanding the key investments and strategies that support program participation and facilitate desired outcomes is imperative for both providers and policy makers.

In 2015, CMS developed the ACO Investment Model (AIM)<sup>3</sup> to encourage the formation of MSSP ACOs in rural and underserved areas by providing up-front and ongoing payments to participating ACOs, which ACOs paid back to CMS through any earned shared savings. Here, we analyze CMS-required expense report data submitted by AIM ACOs to understand where and how they chose to invest: the types of expenses reported, the broad areas that ACOs chose to prioritize with investments, and the specific strategies in which ACOs invested.

## METHODS

Final approved quarterly expense reports consisted of ACO-reported line-item expenses in 6 broad CMS-defined categories: clinical staff, nonclinical staff, contracted labor, information technology (IT) (software and hardware), education and training, and other. We analyzed expense reports from quarter 3 of 2015 through quarter 4 of 2018 for 45 AIM ACOs. Note that CMS considered augmenting provider salaries, providing bonuses to executives or administrators, and purchasing imaging equipment as unacceptable uses of CMS funding.

We reviewed the line-item expenses and classified them into a more informative and consistent set of categories: access to care, accounting systems, administrative staff/support, behavioral health, benefits, boards/committees, care coordinators/management, compliance, data analytics, data security, electronic health records (EHRs)/health information exchange (HIE), executive staff, financial management, insurance related to ACO operations, IT hardware,

## ABSTRACT

**OBJECTIVES:** To understand the investments that Medicare Shared Savings Program accountable care organizations (ACOs) in the ACO Investment Model (AIM) made to participate in the program and the costs that they incurred as a result of their efforts to lower spending and improve quality.

**STUDY DESIGN:** We conducted a systematic review and categorization of all available and approved quarterly expenses reported by AIM ACOs.

**METHODS:** We reviewed final approved quarterly expense reports submitted by ACOs detailing how they spent funds in the quarter. All distinct line-item descriptions were classified into a more informative and consistent set of categories. We then applied higher conceptual dimensions (type of care input and type of ACO strategy) to these newly categorized expenses to facilitate additional analysis of spending patterns.

**RESULTS:** AIM ACOs reported expenses of \$264.8 million over the 3 performance years (2016-2018). The majority of the \$264.8 million in expenditures was incurred for personnel (55.5%), followed by infrastructure (22.3%), management firm expenses (15.3%), and internal programs and systems (6.9%). The dominant identifiable ACO strategy was care coordination and management, accounting for 52.9% of related ACO expenses.

**CONCLUSIONS:** AIM ACOs invested most heavily in personnel, information technology, and care management, with less than half of the investments explicitly tied to a strategy for improving quality or reducing spending. Efforts to change clinician practice patterns, alter the way patients access the health care system, and institute other practice redesigns were not primary targets for investment.

*Am J Manag Care.* 2021;27(12):569-572. doi:10.37765/ajmc.2021.88795

### TAKEAWAY POINTS

We conducted a systematic review and categorization of all available and approved quarterly expenses reported by accountable care organizations (ACOs) participating in Medicare's ACO Investment Model to better understand how participants in the model invested to achieve program goals.

- ▶ Knowing how ACOs are allocating resources to achieve the goals of reducing spending and improving quality is critical to understanding the costs of these efforts, what strategies ACOs are pursuing, and in turn how future models can be designed to better facilitate these goals.
- ▶ Understanding what ACOs do when provided financial assistance can help policy makers understand how investments can best facilitate the expansion of value-based care into areas with lower levels of participation.
- ▶ With an understanding of where ACOs are investing, we are better able to understand how to replicate successes or target interventions if outcomes no longer align with expectations.

IT staff, legal, licensing and credentialing, management staff, management/consulting fees, marketing, memberships, and other.

We then distinguished the recategorized expenses along 2 conceptual dimensions: (1) type of care input and (2) type of ACO strategy. The type of care input domain includes all expenses, which are categorized into personnel, infrastructure, internal programs/systems, and management firm expenses. Type of ACO strategy includes only those expenses related to lowering spending or improving quality: care coordination and management, patient access, patient education, practice redesign, and provider coaching/education. The categories within each dimension are mutually exclusive.

We subcategorized personnel spending as either internal or external, with external personnel defined as expenses that the ACO categorized as contracted labor or described as consulting or a management firm in the expense description.

Three individuals independently reviewed the expense categorizations, with 0.06% of expenses needing reconciliation.

## RESULTS

AIM ACOs reported expenses of \$264.8 million over the 3 performance years: \$92.9 million (35%) in CMS-provided funds and \$172 million (65%) in ACO-provided funds. Almost 25% of total spending was on care coordinators or other care management, followed by investments in EHRs and HIE at 18.1%, and management staff at 14.3%. The remaining 27 categories each represented less than 10% of spending and accounted for the remaining 43.3% of spending. ACOs focused CMS-provided funds more on administrative items (eg, organization memberships and staff recruiting) and infrastructure (eg, data security), each of which was fully attributed to CMS-provided funds. Consulting fees, patient education programs, and expanding access to care largely used ACOs' internal funds.

We also identified expenses related to fulfilling the participation requirements of the MSSP. This accounted for \$9 million, or 3.4%, of total reported spending. These expenses include quality reporting (eg, fielding the required beneficiary survey, reporting quality measures), compliance activities, application renewals, legal fees, licensing and

credentialing, and financial activities such as obtaining the required letter of credit. Almost 79.7% (\$7.2 million) of participation-related expenditures used CMS-provided funds.

Looking at expenses by type of care input (**Figure 1**), most of the \$264.8 million in expenditures were incurred for personnel (55.5%), followed by infrastructure (22.3%), management firm expenses (15.3%), and internal programs and systems (6.9%). As described in the Methods section earlier, we were able to identify which personnel were reported as internal to the ACO and which were reported as external, finding that almost all personnel spending was for

internal personnel (93.5%). As such, spending for external personnel was likely captured under "management firm services."

Approximately half of the total expenditures (49.2%; \$130.2 million) were related to strategies aimed at reducing costs or increasing quality (type of ACO strategy). We report these results in **Figure 2**. The dominant identifiable strategy was care coordination and management, accounting for 52.9% of related ACO expenses. This strategy largely used CMS-provided funds, unlike the remaining strategies, which were largely ACO funded. Non-care coordination strategies ranged from 4.2% of related spending (patient access) to 20.7% (practice redesign).

## DISCUSSION

How exactly ACOs allocate resources in response to program incentives has been largely unknown. In terms of care inputs, we found the largest investments in personnel, followed by infrastructure investments, which were dominated by IT expenses. Almost one-sixth of expenses were allocated toward management firms' expenses; this is consistent with many AIM ACOs having relied on management companies to get started.<sup>4</sup> Our personnel investment findings are consistent with other observations that cost-containment efforts have been associated with health care employment growth, which has been associated with spending growth.<sup>5</sup>

Of ACO spending tied to strategies for lowering spending and improving quality, more than half was allocated to care coordination and management programs, which is consistent with the high level of spending on personnel. Care coordination and management can connote many types of activities. To the extent that these programs engage in direct utilization management (eg, steering patients away from emergency departments, shortening skilled nursing facility stays), they may achieve savings. Other care coordination activities aim to improve patient outcomes by meeting medical and social needs, ensuring preventive care, and improving provider communication. Although they are ostensibly good for patients, popular belief is that these aspects of care coordination and management programs are also the key to savings, particularly for high-risk patients. However, this belief may not be conceptually sound<sup>6,7</sup> and is not consistent with

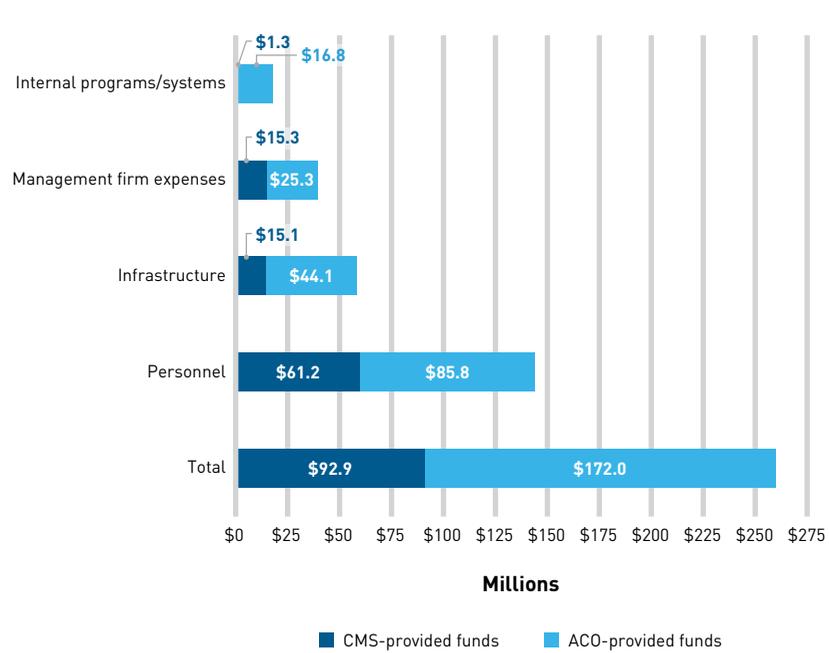
the totality of the empirical evidence.<sup>8,9</sup> Research on the MSSP specifically suggests that although care management programs may improve care experiences,<sup>10</sup> they have not been associated with improved outcomes for complex patients,<sup>11</sup> and savings have not been driven by reductions in admissions for ambulatory care-sensitive conditions or concentrated among high-risk groups.<sup>12</sup> Although we could not distinguish between spending on utilization management vs prevention-oriented activities, it is notable that care coordination and management programs were the focus of such a high proportion of ACO funds despite weak evidence for savings from many of the strategies employed by these labor-intensive programs.

In contrast, ACOs invested only a quarter of funds in strategies with a higher proportion of fixed to variable costs—those whose effects on spending and quality were likely to persist over the long term rather than temporarily (eg, subsidizing when a case manager’s efforts cease). These strategies, which included retraining providers to change their practice patterns, altering the way patients access the health care system, and redesigning practices, received no more than 20% of total ACO spending. When looking at total reported ACO expenditures in terms of care inputs, internal programs and systems that encompass these strategies accounted for less than 10% of total reported spending.

Whether funds were indicated as CMS provided or ACO provided was largely at the discretion of the ACO. However, we can infer that activities that largely used CMS-provided funds align with what the ACOs believed CMS was incentivizing. Through this lens, care coordination and management received the most CMS-provided investment of all strategic activities at 40%.

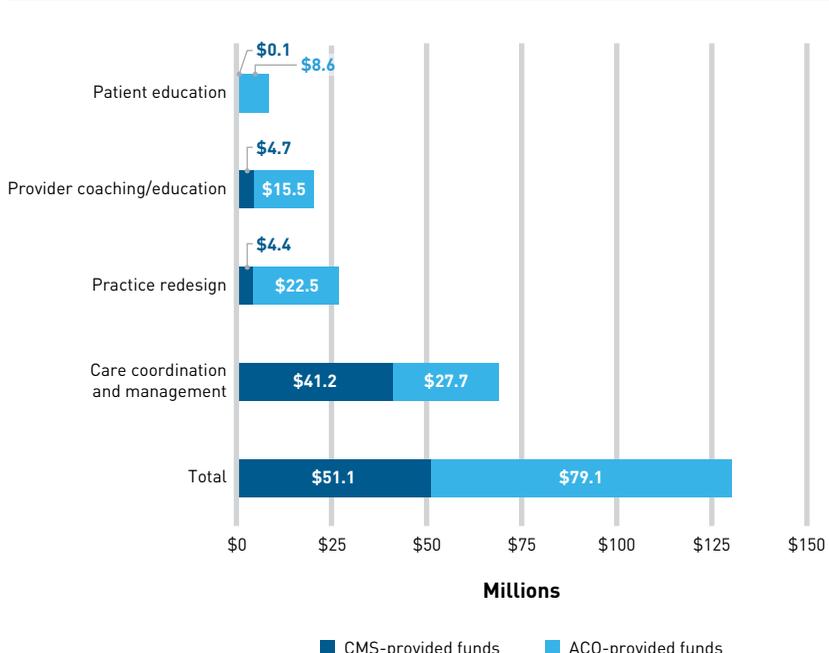
In contrast, 76% of provider education, almost 90% of patient access and practice redesign, and 97% of patient education activities were internally funded by the ACO. This makes sense given that CMS itself defines MSSP ACOs specifically in terms of care coordination, rather than waste reduction or practice transformation.<sup>13</sup> The temporary nature of CMS funding gave ACOs a choice between allocating AIM funds to trial the effectiveness of personnel-heavy care management strategies vs one-time investments in infrastructure, retraining, or practice redesign.

**FIGURE 1.** Medicare Shared Savings Program ACO Investment Model Expenses by Type of Care Input



ACO, accountable care organization.

**FIGURE 2.** Medicare Shared Savings Program ACO Investment Model Expenses by Type of ACO Strategy



ACO, accountable care organization.

Limitations

The reported expenditures may over- or understate actual ACO spending on AIM-related activities, as ACOs reported only internal funds that supplemented CMS funds. Further, CMS funds and ACO funds were fungible, so our distinctions may not be accurate.

Additionally, AIM ACO spending patterns may not represent the spending of ACOs generally. Lastly, we do not know to what extent fee-for-service profits among AIM participants changed because of AIM participation, so we cannot determine the financial impact of participation on the participating providers.

CONCLUSIONS

To date, absent high-level findings in CMS-funded evaluation reports,<sup>4,14</sup> little is known about the financial investments that participants make to become an ACO and maintain that status. Our findings confirm that substantial investments are needed to participate in an ACO and that providing initial funding helps underresourced ACOs overcome those participation barriers.

A better understanding of where ACOs prioritize investments can inform what makes a given ACO successful or not, illuminate how policy makers might encourage those best practices, and help policy makers determine whether to set clearer expectations for how ACOs manage their patient populations when provided up-front funding. Is care coordination and management enough, or should these models encourage participants to implement approaches that more fundamentally alter the way health care is delivered and consumed? Given that the former is more costly to implement and maintain, a greater emphasis on the latter may yield a greater return on investment for both CMS and participating ACOs—particularly given the dearth of evidence that current care management programs result in reduced costs. ■

Acknowledgments

The authors would like to thank David Nyweide, PhD; Sasha Brodsky, PhD; Kimberly Groover, PhD; Ariana Bengtsson, MPP; and Johanne Germain, MHS, for supporting this work.

**Author Affiliations:** Abt Associates (CH, BF, MJT, LS), Cambridge, MA; Harvard Medical School (JMM), Boston, MA.

**Source of Funding:** This work was funded by CMS under contract HHSM500201400261; task order No. HHSM500T0004.

**Author Disclosures:** Ms Hersey, Dr Fout, Dr Trombley, and Dr Scarpati report receiving funding from CMS under contract HHSM500201400261; task order No. HHSM500T0004. Dr Scarpati was an employee of Abt Associates at the time this article was submitted. Dr McWilliams is an unpaid member of the board of directors for the Institute for Accountable Care and a consultant to Abt Associates.

**Authorship Information:** Concept and design (CH, JMM, BF); acquisition of data (BF); analysis and interpretation of data (CH, JMM, BF, MJT, LS); drafting of the manuscript (CH, JMM, BF, MJT, LS); critical revision of the manuscript for important intellectual content (JMM, BF, MJT, LS); statistical analysis (BF); obtaining funding (BF); administrative, technical, or logistic support (BF); and supervision (BF).

**Address Correspondence to:** Catherine Hersey, MPH, Abt Associates, 10 Fawcett St, Cambridge, MA 02138. Email: Catherine\_hersey@abttassoc.com.

REFERENCES

1. Trombley MJ, Fout BT, Brodsky S, McWilliams JM, Nyweide DJ, Morefield B. Early effects of an accountable care organization model for underserved areas. *N Engl J Med*. 2019;381(6):543-551. doi:10.1056/nejmsa1816660
2. McWilliams JM, Hatfield LA, Landon BE, Hamed P, Chernew ME. Medicare spending after 3 years of the Medicare Shared Savings Program. *N Engl J Med*. 2018;379(12):1139-1149. doi:10.1056/nejmsa1803388
3. ACO Investment Model. CMS. Accessed July 29, 2020. <https://innovation.cms.gov/innovation-models/aco-investment-model>
4. Evaluation of the Accountable Care Organization Investment Model: AIM implementation and impacts over two performance years. Center for Medicare and Medicaid Innovation. September 2019. Accessed November 4, 2021. <https://innovation.cms.gov/aim-second-annrpt.pdf>
5. Skinner J, Chandra A. Health care employment growth and the future of US cost containment. *JAMA*. 2018;319(18):1861-1862. doi:10.1001/jama.2018.2078
6. McWilliams JM. Cost containment and the tale of care coordination. *N Engl J Med*. 2016;375(23):2218-2200. doi:10.1056/NEJMp1610821
7. McWilliams JM, Schwartz AL. Focusing on high-cost patients — the key to addressing high costs? *N Engl J Med*. 2017;376(9):807-809. doi:10.1056/nejmp1612779
8. Finkelstein A, Zhou A, Taubman S, Doyle J. Health care hotspotting — a randomized, controlled trial. *N Engl J Med*. 2020;382(2):152-162. doi:10.1056/nejmsa1906848
9. Peikes D, Chen A, Schore J, Brown R. Effects of care coordination on hospitalization, quality of care, and health care expenditures among Medicare beneficiaries. *JAMA*. 2009;301(6):603-618. doi:10.1001/jama.2009.126
10. McWilliams JM, Landon BE, Chernew ME, Zaslavsky AM. Changes in patients' experiences in Medicare accountable care organizations. *N Engl J Med*. 2014;371(18):1715-1724. doi:10.1056/nejmsa1406552
11. Ouayogodé MH, Mainor AJ, Meara E, Bynum JPW, Colla CH. Association between care management and outcomes among patients with complex needs in Medicare accountable care organizations. *JAMA Netw Open*. 2019;2(7):e196939. doi:10.1001/jamanetworkopen.2019.6939
12. McWilliams JM, Chernew ME, Landon BE. Medicare ACO program savings not tied to preventable hospitalizations or concentrated among high-risk patients. *Health Aff (Millwood)*. 2017;36(12):2085-2093. doi:10.1377/hlthaff.2017.0814
13. Shared Savings Program: about the program. CMS. Accessed July 29, 2020. <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/about>
14. Evaluation of CMMI accountable care organization initiatives: advance payment ACO final report. Center for Medicare and Medicaid Innovation. November 25, 2016. Accessed November 4, 2021. <https://innovation.cms.gov/files/reports/advpayaco-fnevalrpt.pdf>

Visit [ajmc.com/link/88795](http://ajmc.com/link/88795) to download PDF and eAppendix