

Policy Working Paper No. 2

Driving Value- Based Care: Accountable Care Organizations in Emerging Markets

*Maureen Lewis
Kiran Correa*

April 2019



Driving Value-Based Care: Accountable Care Organizations in Emerging Markets

Maureen Lewis
Aceso Global

Kiran Correa
Aceso Global

We would like to thank Gerard La Forgia for his value comments on this paper.

Recommended citation: Lewis, M. and K. Correa. 2019. "Driving Value-Based Care: Accountable Care Organizations in Emerging Markets." Aceso Global Policy Working Paper No. 2. Washington, DC: Aceso Global.

The views expressed in this Aceso Global Working Paper are those of the authors and do not necessarily reflect the views or policies of the authors' organization or funders.

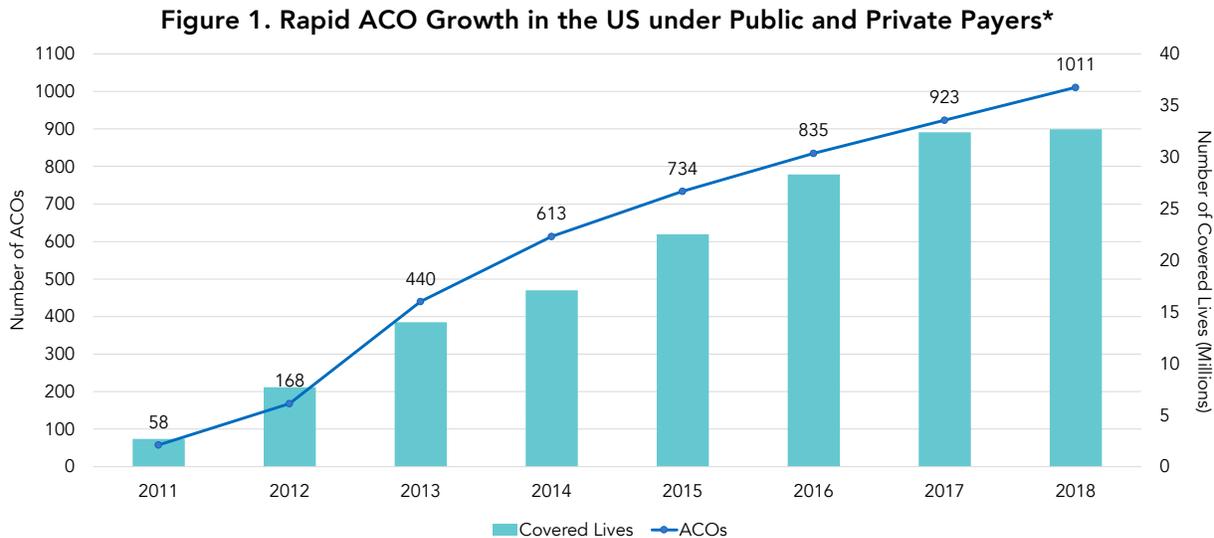
Healthcare in emerging markets and developing economies (EMDEs) is on an upswing, with the global agenda for Universal Health Coverage (UHC) and a renewed push to raise quality in service delivery (UNGA 2015, Lancet Global Health Commission 2018, NASEM 2018). At the same time, new technologies and pharmaceuticals are emerging, and citizen demand is rising due to growing incomes and aging populations, phenomena occurring in even the poorest countries. The trends imply rising costs and an urgent need to prioritize quality in healthcare.

Despite these factors, public and private healthcare delivery and financing systems in EMDEs have changed little since the Alma Ata Declaration of 1978, and are ill-equipped to address current imperatives. Value-based care (VBC) is increasingly seen as the future, a way to reconsider how care is delivered and what is financed. VBC shifts the focus from paying for volume to paying for quality in healthcare. Payment is linked to health outcomes and other indicators of quality and efficiency, rather than to the number of services provided. VBC targets and measures quality, costs and outcomes across all levels of a healthcare system (Porter and Teisburg 2006, NEJM 2017).

The appeal of paying for quality rather than volume is powerful and appropriate, but how to achieve this shift remains globally challenging. The US government through its Medicare and Medicaid systems, which pay for healthcare services delivered by the private sector for the elderly and the poor, respectively, has been a pioneer on this front, promoting alternative delivery and payment models that have contributed to improvements in both quality and cost containment (GAO 2018, KFF 2019, Ryan et al. 2017).

A particularly promising option for moving towards VBC is the Accountable Care Organization (ACO), an arrangement that integrates all aspects of healthcare delivery and finance, and drives improvement through initiatives and leadership of clinicians. It is a model that allows building on existing strengths in healthcare delivery, and lends itself to implementation in both public and private arenas.

The power of ACOs in the US is shown in Figure 1. They grew rapidly between 2011 and 2018, expanding from 58 to well over 1,000 organizations that now cover over 35 million beneficiaries. The growing appeal of ACOs stems from their ability to drive VBC.



*Data is for Q1 of each year.
Sources: Muhlestein and McClellan 2016, Muhlestein et al. 2017, Muhlestein et al. 2018

This paper explains ACOs, their characteristics, benefits and factors driving ACO success, and then elaborates on the context of and relevance to EMDEs, where the ACO model holds considerable promise.

What Are ACOs?

ACOs are essentially a partnership between clinical and non-clinical entities that come together to drive value in healthcare payment and delivery through higher patient quality and lower costs (Mathematica n.d.), as described in Box 1. ACOs lend themselves to both public and private delivery and finance, a unique characteristic that extends their potential influence in contributing to improved access, higher quality and lower cost at a system level.

While highly flexible in structure, ACOs invariably harness the independence and clinical excellence of physician groups, supplemented by the services of a non-clinical partner that provides management infrastructure, such as IT, marketing, payment administration, pricing and performance monitoring, among other services. The non-clinical partner can be an insurer, but does not need to be. Data and oversight provide the basis for jointly tracking costs and quality, and ensuring accountability of partners.

Fundamental to ACOs is altering the incentives that providers face. Successful ACOs are able to achieve both healthier patients and financial savings – the basis of VBC. Higher quality care for patients, particularly primary care, translates into lower utilization of inpatient and emergency care, and reduced costs. The partnership “shares the savings” from reduced reliance on such costly services, which gives providers and partners monetary incentives to reach wellness targets that trigger the savings. Higher earnings for the ACO stem from the “shared savings”, and can be used to supplement salaries, hire staff, upgrade equipment or otherwise invest in the ACO. Patients share the benefits through healthier lives, and lower morbidity and mortality.

Success for ACOs hinges on their ability to meet performance standards while keeping costs low.

ACO design is highly contextual, based on the existing provider market, patient population and goals of the individual provider members (e.g., retaining autonomy, gaining access to capital, etc.), among other factors. There is no preferred organizational form (Ouayogodé et al. 2017, Schulz et al. 2017). Indeed, ACOs can emerge from various angles, from a hospital expanding outpatient services, to insurance companies engaging with providers in order to improve physician group management, to health maintenance organizations embracing VBC. The structure of the ACO matters less than the effectiveness of the embedded incentives in changing management and provider behaviors to deliver care in better and more effective ways. Getting the incentives and corresponding enabling elements right from the start is therefore crucial to the success of an ACO.

Box 1: ACO Basics

ACOs comprise a group of healthcare providers (physicians and/or hospitals) who collectively assume responsibility for the healthcare costs and quality outcomes of a defined population. These provider-led organizations are built on partnerships between clinical and non-clinical entities that together can enhance the operational capacity of clinical care. ACOs are distinct legal entities that enter into contracts with public and/or private payers to deliver enhanced healthcare services that improve value for patients, payers and society more broadly (HCTTF 2017, Kirschner n.d.).

What Makes ACOs Successful in Driving VBC?

The flexibility of the ACO model in structure and components belies the complexity of the key drivers of successful ACOs. The essential elements of ACOs – the payment arrangements, the nature of the partnerships, a primary care focus, and a comprehensive IT system that produces data for performance and payment management – inform the partnership, generate cost and savings information, and permit accountability and quality monitoring. Each of these four elements is discussed in turn.



1. Payment Arrangements that Embed the Right Incentives

Embedding the right incentives starts with payment arrangements. The way providers and organizations are paid directly influences how they behave; this in turn affects health system measures such as efficiency and quality – key ACO and VBC objectives, which have been shown to be fundamental for effective healthcare delivery. Thus, payment arrangements are at the heart of ACO success or failure.

Every payment arrangement incentivizes providers and organizations to act in certain ways. Some provoke desired behavior changes, like conducting more cancer screenings, while others lead providers and organizations towards undesired actions, like unnecessary diagnostic testing. Often, a single payment arrangement generates multiple incentives. Understanding how a payment arrangement may influence provider behavior is critical to achieving improved health, higher value care and lower costs (OECD 2016).

Globally, providers are typically paid on a fee-for-service basis in the private sector and through line-item budgets in the public sector; these offer payers (including government) little leverage to influence provider behavior. Fee-for-service payments reward volume and make it difficult to control costs or quality of care. Line-item budgets are rarely accompanied by information or performance monitoring. In both cases, few opportunities exist for rewarding or penalizing performance, and the payer bears all of the risk.

Recognizing these limitations, ACOs have shifted away from traditional payment arrangements and towards models that offer opportunities to reward providers for desired behaviors, and, in some cases, penalize them for underperforming (HCTTF 2016). Table 1 below summarizes a sample of possible ACO payment arrangements. Some offer greater potential to influence provider behaviors than others. The weight of the incentive largely derives from the degree to which providers share the risk for both service costs and health outcomes. Capitation and global budgets can transfer the most risk to providers, but must be accompanied by robust data, use of data and accountability for performance.

Table 1. Options for Innovative ACO Payment Arrangements		
Payment System	Definition	Additional Considerations
<i>Pay for performance (P4P)</i>	<ul style="list-style-type: none"> • Bonus/penalties for hospitals, physician groups or health care teams that reward meeting defined performance standards 	<ul style="list-style-type: none"> • Requires: <ul style="list-style-type: none"> – Data to track activity, performance and outcomes – Management to assess data, compare performances, administer rewards/penalties
<i>Bundled payments</i>	<ul style="list-style-type: none"> • Predetermined, risk-adjusted payment for specific conditions over the full care cycle of a clinical episode; encompasses all inpatient and outpatient services • Following of clinical protocols embedded in process • Provider held to account for performance 	<ul style="list-style-type: none"> • Need to: <ul style="list-style-type: none"> – Data to track activity, performance and outcomes – Define the full set of inpatient and outpatient needs and their cost to set bundled price – Monitor for compliance, making payments
<i>Global capitation with autonomy & accountability</i>	<ul style="list-style-type: none"> • Fixed prospective/beneficiary payment to an integrated care entity to cover all patient services for a defined population over a specified time period • Provider has autonomy structure and delivery • Provider held to account for performance 	<ul style="list-style-type: none"> • Requires: <ul style="list-style-type: none"> – Data to track activity, performance and outcomes – Management to assess data, compare performances, administer rewards and penalties
<i>Global budget with autonomy & accountability</i>	<ul style="list-style-type: none"> • Fixed prospective payments paid annually or monthly to hospitals to cover full inpatient care for a defined population • Provider has autonomy structure and delivery • Provider held to account for performance 	<ul style="list-style-type: none"> • Requires: <ul style="list-style-type: none"> – Data to track activity, performance and outcomes – Management to assess data, compare performances, administer rewards and penalties – Payer must be consistent in payment and policy across providers and over time



Sources: Authors, based on Berenson et al. 2016 and Langenbrunner et al. 2009

Total risk transfer to providers is neither feasible nor desirable given the level of clinical integration as well as data and managerial capacity required. Adopting other payment models is achievable in the short- and medium-term, particularly pay-for-performance. Bundled payments, in which providers receive a single payment for a given patient’s diagnosis to cover outpatient and inpatient care for that illness, have worked effectively for orthopedic surgery and some cancer care in the US (Glickman et al. 2018). Their feasibility and effectiveness as an incentive payment has not yet been widely embraced by private payers and some health conditions do not lend themselves to such a payment arrangement. This is partly because of the complexity of oversight required, as quality can be difficult to verify.

Regardless of what payment arrangement is selected, successful implementation depends on strong accountability mechanisms.

“Shared savings”, defined in Box 2, are common to many ACOs and can be implemented within the context of numerous payment arrangements. The aim is to incentivize efficient, high quality care by offering the possibility of financial rewards. The ability of shared savings to change providers’ behaviors depends on numerous factors, including how savings are allocated within the ACO (e.g., as physician bonuses, for infrastructure upgrades, to invest in new care programs, etc.). Shared savings can also be

Box 2: “Shared Savings” Drive Efficiency and Quality

In a shared savings arrangement, a payer/insurer and ACO negotiate a cost benchmark for delivering care to a defined population for a given period of time, usually a year; if actual spending is below the benchmark, savings are generated. Savings are then “shared” between the payer/insurer and ACO according to a pre-determined formula. To discourage skimping on patient safety and care standards to cut costs, providers are often held accountable by the payer for meeting quality targets in addition to cost benchmarks (Bailit and Hughes 2011).

coupled with down-side risk – in which the ACO is accountable for expenditures above an agreed cost benchmark – creating additional pressures for change. Enacting shared savings may be especially useful as a transitional payment arrangement in environments in which fee-for-service payment is particularly entrenched.

Regardless of what payment arrangement is selected, successful implementation depends on strong accountability mechanisms that hold providers to account for the quality of their care. Only with consistent monitoring and oversight can payers determine whether an ACO is meeting contractual targets, and thus administer payments, and rewards or penalties, where applicable. Accountability must permeate down to the provider level, so that ACOs can hold individual providers responsible for their performance.

2. Strong Clinical and Management Partnerships

Success for ACOs hinges on their ability to meet performance standards while keeping costs low. Achieving these twin goals often requires engaging strategically with clinical and non-clinical partners to define or adjust the ACO’s scale or scope of service delivery, and to ensure effective management and oversight across the organization. A survey of over 275 ACOs revealed that over 80 percent involved the formation of at least one new partnership, and 55 percent were comprised of all new partners (Lewis et al. 2017). The number one reason cited by ACOs for engaging in partnerships is resource complementarity – ensuring the right mix of skills, capacity and resources across the ACO provider network to successfully meet contractual targets for quality and responsiveness (Lewis et al. 2017).

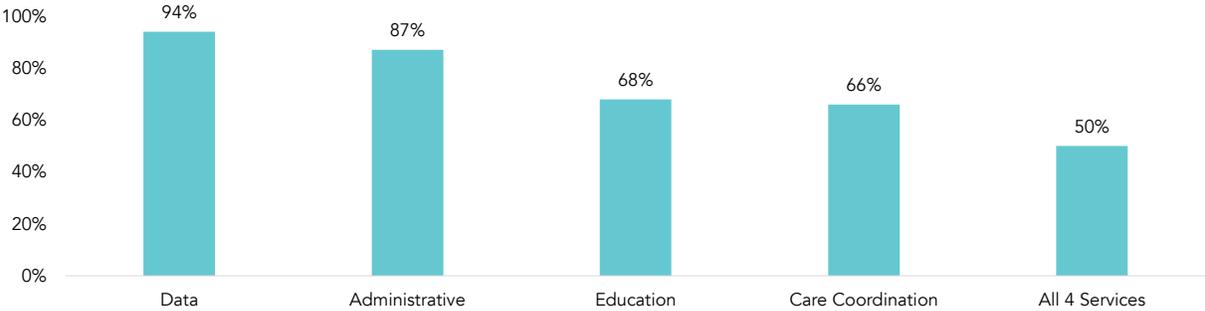
ACOs can incorporate any combination of primary care physicians, specialists and/or hospitals, or they can contract out these and other services, such as laboratory and other diagnostic testing, as needed. ACO partnership arrangements in the US range from independent physician practice associations to group practices, joint hospital-physician ventures to independent hospitals, to already fully-integrated delivery networks spanning thousands of employees and all levels of care (Muhlestein et al. 2014).

Two-thirds of sampled ACOs stated that their non-clinical management partner shares in financial risk/reward.

Further, some ACOs leverage technology to create “virtual” ACOs, which are conducive to rural and smaller provider organizations as they allow providers to coordinate care, even at a distance, as well as develop a large enough patient base to manage risk (Houston and McGinnis 2016). Some ACOs also harness distance medicine through mobile phone connection or telemedicine.

Non-clinical functions related to administration, management and IT are also vital to ACOs. Figure 2 displays broad categories of services provided by non-clinical management partners in a sample of ACOs.¹ Two-thirds of the sampled ACOs stated that their non-clinical management partner shares in financial risk/reward (Lewis et al. 2018a).

Figure 2. ACOs Reporting Specific Services from their Non-Clinical Management Partner* (%)



*Based on 102 ACOs reporting a non-clinical management partner
Source: Lewis et al. 2018a

Box 3 summarizes some of the key non-clinical functions that partners provide clinical ACO members. Many of these functions are requirements for engaging in VBC contracts with public and private payers.

Partnerships are the foundation of most ACOs, ensuring the right managerial and clinical capacity across the ACO to enable the organization to deliver value. They can take numerous forms, but success depends on strong partnership, shared vision and commitment to joint implementation.

¹Non-clinical management partners can include some combination of the following: insurance companies, commercial health plans, management services organizations, non-profit consortiums, Third-Party Administrators (TPAs), or an agency of government, e.g., the Ministry of Health, a public insurer or an independent oversight body.

Box 3: Non-Clinical Partners Bring Complementary Expertise

ACO Management

- Contract negotiation and management
- Claims and payment processing
- Managing and administering shared savings/penalties
- Recruitment of new ACO provider members
- Sales and marketing (private ACOs)

IT and Data

- Establishing interoperable data systems and patient records
- Software development
- Performance monitoring at the provider, facility and ACO-level
- Data analytics

Quality and Efficiency Improvement

- Identifying areas for cost reduction and quality improvement
- Provider education and training
- Development of guidelines, protocols and standards
- Technical assistance on implementing elements of new care models

Sources: Berdofe 2012, Burns et al. 2013, Kash and Tan 2016, Lewis et al. 2018a, NORAC 2018

3. Innovative Care Model Centered on Primary Care

ACOs generate significant innovations in service delivery (Pierce-Wrobel and Micklos 2018). They aim to reorient provider behaviors around new objectives: cost containment over revenue maximization, and population wellness over episodic treatment. These seemingly simple objectives conflict with existing incentives and traditional ways of delivering care.

In both public and private systems around the world, patients typically see a doctor when they are feeling unwell, get treatment and then do not interact with the health system again until their next illness episode (Kruk et al. 2015, Yellapa et al. 2017). There is often minimal interaction between providers beyond ad-hoc referrals, and there is little to no follow-up. Further, the weak state of primary care in terms of infrastructure, supplies and staff in many contexts frequently leads to patients bypassing primary care facilities altogether and going straight to a hospital, even for minor conditions (Akin and Hutchinson 1999, Kruk et al. 2014, Karkee et al. 2015, World Bank 2017). This model of care – characterized by lack of prevention and coordination of care, over-use of hospitals and provider fragmentation – hurts healthcare performance and patient outcomes.

Specifically, current practices translate into under-investment in prevention, overuse of high-end care, limited tracking of patients with chronic conditions and poor health outcomes. Moreover, the current model is costly (Gottret and Schieber 2006, Jasinski et al. 2013, Zeidler et al. 2008). In Brazil, it is estimated that establishing stronger primary care with a gate-keeping role would reduce the number of hospitalizations by approximately 30 percent, and, for cardiovascular diseases alone, reduce expenses by over US\$300 million (World Bank 2017).

Given the global wave of non-communicable and chronic conditions, improving health outcomes and reining in costs hinges on altering the existing care model (NCD Countdown 2030 2018). Successful ACOs

do this by deploying two broad care strategies: population health management and care coordination (HCTTF 2017, Dupree et al. 2014). Some salient features of these strategies are highlighted in Box 4. Both of these strategies help to shift care out of hospitals and emergency departments, and improve patient health outcomes.

The first strategy, population health management, involves proactive and consistent patient engagement to deliver prevention services and education to keep patients healthy. Effectively, providers need to reach and register patients before health issues emerge. It emphasizes patient stratification to identify high-risk patients to effectively manage their health risks, and avoiding expensive curative care for patients whose disease profile can be managed with simpler interventions (HCTTF 2017).

The second strategy, care coordination, relates to how providers collaborate with one another regarding a patient’s care as that patient moves through the healthcare system. Well-coordinated care is evidenced by frequent cross-provider communication, seamless patient transitions between different providers including functional referrals and counter-referrals, and a multi-disciplinary and team-based approach in which care teams work together to address all aspects of patients’ physical and mental health (AHRQ 2018). Figure 3 summarizes common follow-up services used by ACOs to improve care coordination after hospitalization. These elements, common in “comprehensive care management programs”, focus on actions that reduce the risk of hospital readmission. The benefits of coordinated actions include care continuity, and harmonization of treatment across providers (CMS 2019b).

Box 4: Strategies of New Care Model Centered on Primary Care

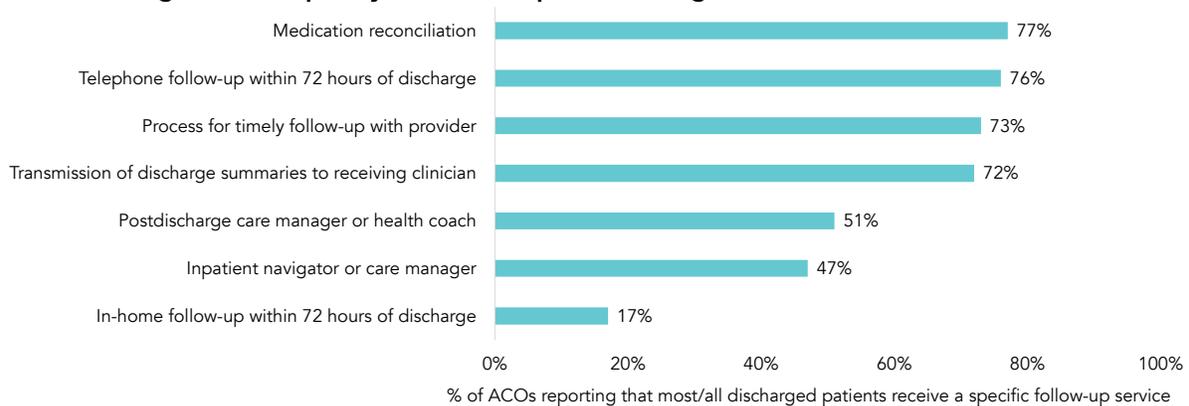
Population Health Management

- Prevention and proactive outreach
- Ease of patient access to care
- Patient engagement and education
- Risk stratification
- Disease management

Care Coordination

- Managing patient transitions, including referrals and counter-referrals
- Multi-disciplinary, team-based approach
- Continuity of care
- Integrated care records

Figure 3: Frequency of Post-Hospital Discharge Services in Selected ACOs*



*Based on a survey of 394 ACOs, 63 percent of which reported having active comprehensive care management programs. Source: Peck et al. 2018

To integrate these two different but complementary strategies into a coherent care model, successful ACOs place strengthened primary care systems at their core (Gold 2015, Jabbarpour et al. 2018). Primary care serves as a hub for organizing preventive and acute services for patients, empowering primary care

providers to track patients across the care continuum, and at home. Primary care providers engage in population health management, and also coordinate services with other providers, e.g., specialists, surgeons, social workers, and others, as needed.

An ACO does not need to include just primary care physicians to reorient towards primary care. While traditional payment mechanisms generally incentivize hospitals to fill beds, when hospitals are part of an ACO (e.g., hospital-led ACO, integrated network), they can be encouraged to seek ways to keep patients out of the hospital through new delivery approaches as well as innovative payment arrangements (such as pay-for-performance, bundled payments or capitation) that implicitly or explicitly incentivize these behaviors. The chosen payment arrangement – the topic of the first item on this list – can thus support, or hinder, adoption of the new care model.

4. Robust Digital Infrastructure and Use of Data

The final aspect of the ACO model assumes the measuring, sharing, reporting and use of large amounts of data to inform decisions at both the clinical and managerial levels. Deploying effective health information systems that enable data to be shared across facilities, as well as tools to analyze this data, is fundamental to ACO success. While this is presented as a standalone element, in reality, robust digital infrastructure and data use underpin every aspect of ACO functioning. Specifically, successful ACOs are able to employ data across three broad areas (OECD 2016, HCTTF 2017):

1. Administrative and financial management;
2. Population health management and care coordination; and
3. Performance and outcome monitoring.

First, ACO administrators utilize data generated within the ACO for everything from provider payment to human resources management to monitoring quality. “Shared savings” and other innovative payment arrangements such as pay-for-performance are only feasible with adequate data on financial performance and specifically on costs. ACOs, like any well-managed healthcare organization, require detailed information for management purposes; efficient data systems help to smooth these processes.

Second, analysis of patient data helps providers engage in population health management practices such as risk stratification, generating automatic reminders when patients are due for appointments, and assisting in patient engagement and education. Additionally, interoperable data systems facilitate the rapid transfer of patient records and information across providers, which bolsters care coordination.

Data are the lifeblood of the ACO model, running through all aspects of the organization.

Finally, ACOs utilize data to monitor performance and outcomes within their organization. Access to provider-level (e.g., physicians, nurses, clinical staff) data is a precondition to holding providers accountable. ACOs also utilize organizational data to identify areas of possible improvement, such as pinpointing inefficiencies or sources of quality breakdowns.

While ACOs in the US tend to have sophisticated data systems, necessary data can be generated by harnessing existing information sources: with adaptations and additions, it is possible to build appropriate information system suited to local circumstances. Examples of data that could be harnessed and built upon to support the launch of an ACO include: health management information systems (HMISs), Diagnostic-

Related Groups (DRGs), electronic medical records (EMRs), other information technology data and even paper records. One or more of these can be used to initiate the process. Developing a platform for an integrated information system can be accomplished in parallel. In short, attention needs to be given to the information and data component, but there is no predefined starting point.

Data are the lifeblood of the ACO model, running through all aspects of the organization and critical to setting the right incentives, equipping the ACO with sufficient knowledge on cost and performance to respond to incentives, and ensuring accountability across providers and payers.

How Have ACOs Succeeded in Driving VBC?

The four elements described in the previous sections define the incentives and conditions necessary for ACO success. How they are structured and implemented determines the effectiveness of an ACO. This section examines how ACOs have succeeded in driving VBC in the US. Broadly, while the ACO experiment is still in its infancy, growth has been rapid, and early evidence is promising: ACOs have generated modest savings, and have more consistently improved care quality (Song and Fischer 2016). In other words, they have achieved the goals of VBC.

Savings have arisen partly from reducing wasteful spending. For example, an analysis of the performance of ACOs contracted with the US government's health insurance plan for the elderly, Medicare² (Medicare-financed ACOs, where Medicare pays but private ACOs deliver care), found significant reductions in post-acute care spending, specifically spending on costly Skilled Nursing Facilities,³ without negative impacts on quality (McWilliams et al. 2017).

Some ACOs have also reduced the use of costly hospital services and expanded primary care services. Figure 4 shows that from 2011 to 2014, private Coordinated Care Organizations,⁴ a type of ACO in the state of Oregon, were able to reduce monthly inpatient care per capita spending by 14.8 percent. During this same period, they increased spending on primary care services by 19.2 percent (McConnell 2016). An analysis of Medicare-financed ACOs reinforces this finding: the largest absolute spending reductions over the program's first three years were in inpatient care (DHHS OIG 2017). On the whole, the ACO model appears to have initiated efficiency gains, including the shifting of care out of hospitals into outpatient settings.

Taken together, ACOs have simultaneously succeeded in raising quality of care, as measured by indicators related to improving patient safety and care coordination, increasing preventive health activities, and effectively targeting at-risk populations, among other categories (DHHS OIG 2017).

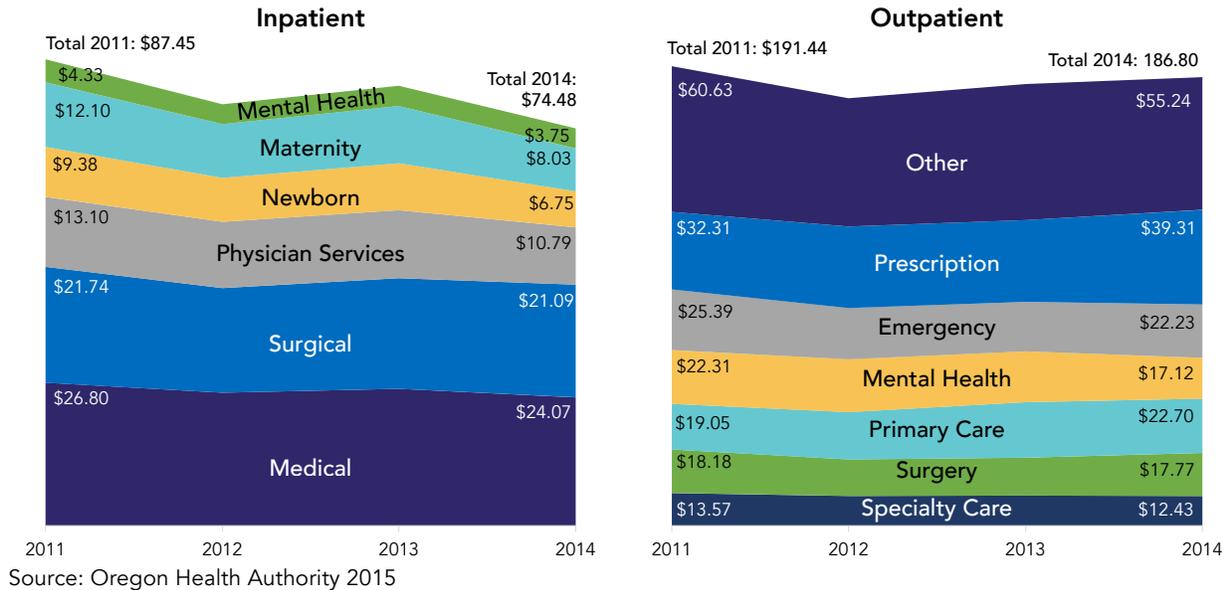
A subset of high-performing Medicare-financed ACOs have succeeded in either reducing or holding steady emergency department visits among their beneficiaries at a time when emergency care usage was rising nationally, implying further improvements in care delivery (DHHS OIG 2017, Childs 2018).

²Refers to those participating in Medicare's Shared Savings Program for ACOs.

³Skilled Nursing Facilities (SNFs) are considered a major source of wasteful expenditure as they are reimbursed on a per diem basis that encourages retaining patients longer than clinically necessary (McWilliams et al. 2017).

⁴Coordinated Care Organizations are contracted with the state of Oregon's Medicaid plan, which finances care for the poor and disabled.

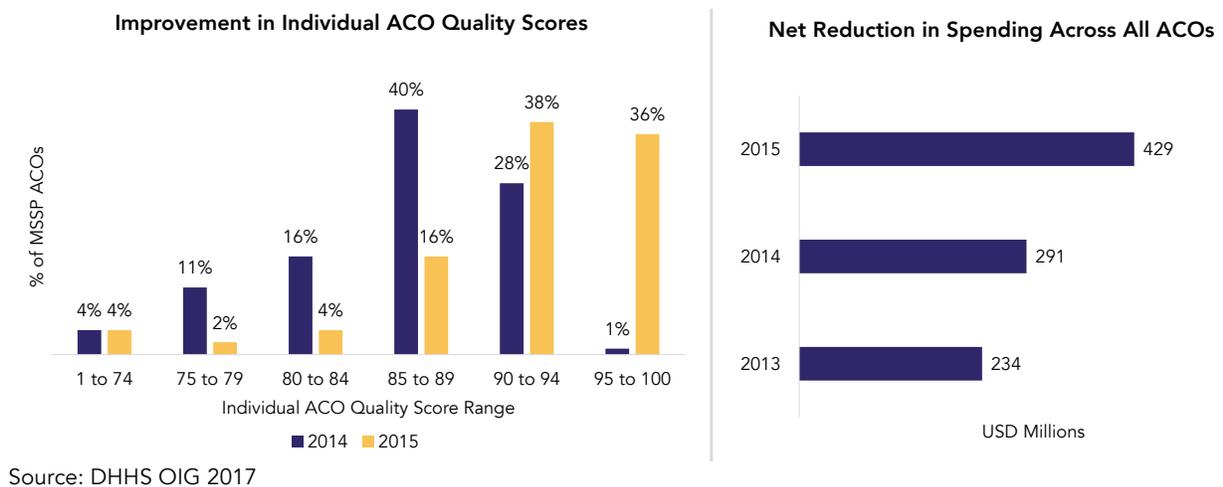
Figure 4. Costs Trends for Oregon's ACOs (monthly costs per capita)



Additionally, comparing ACO performance to that of organizations under more traditional financing and delivering arrangements shows that ACOs deliver higher quality care than their peers. From 2013-2015, Medicare-financed ACOs outperformed providers paid on a fee-for-service basis on over 80 percent of measured quality indicators. For example, they beat Medicare fee-for-service providers in lowering hospital readmission rates (DHHS OIG 2017), and in the process also improved patient satisfaction and access to care (Song and Fischer 2016).

Finally, available evidence suggests that ACO performance tends to improve over time, especially when it comes to cost savings (DHHS OIG 2017, Schulz et al. 2017); accordingly, it may take time for an ACO to start generating expected results. Nonetheless, the US experience demonstrates that, with strong commitment, considerable positive change is possible in just a few years, as Figure 5 shows.

Figure 5. Quality Improvement and Cost Containment in Medicare-financed ACOs, 2014-2015



ACOs have found an effective formula for achieving VBC, and the success suggests directions for other countries facing challenges of low quality and high costs. The UK's National Health Service (NHS) has committed to adapting the ACO model into its delivery system (NHS 2018), and other European countries are considering following suit.

Challenges of the ACO Model

ACOs have filled a gap in the US healthcare landscape and have inspired further movement to VBC, but they have not been without challenges. Considerable skepticism surrounded the establishment of ACOs, given past experiences in the US with early managed care organizations, but the net growth of ACOs and their success in enhancing quality of care has dampened some of these initial criticisms. Still, some ACOs have fallen short, and valuable lessons can be extracted from these experiences.

In a review of all ACOs in 2018, Mechanic et al. (2019) conclude that establishing and sustaining an ACO hinges on the ability to reorient delivery to significantly new care processes, upgrade and align staff competencies to those new processes, adapt and use data and reporting systems, and enhance reliance on analytics, which together entail a major culture shift in healthcare delivery. Some ACOs have failed or are not meeting expectations because they are unable to support this culture shift. Lewis et al. (2018b) point to the difficulties inherent in organizing heretofore independent physicians with little knowledge of new care models into group practices or larger organizations focused on new priorities, as well as challenges around establishing and managing a new organization or spin-off. Additionally, while risk sharing between payers and providers offers a key ingredient in driving success of ACOs, moving too quickly to “shared savings” and/or financial risk-sharing before a functioning organization is up and running has also posed difficulties.

These shortcomings offer cautionary notes to those embracing the ACO approach. While valuable, ACOs require new and different skills, and the shortcomings highlighted above suggest the need for attention to management, processes, culture, training and systematic introduction of new elements when adopting the ACO model.

Adapting ACOs in Emerging Markets and Developing Economies

Despite the boost from the UHC agenda and the movement toward VBC in the OECD, the vast majority of healthcare systems in EMDEs, both public and private, remain stuck in a model of service delivery from the 1970s, emphasizing access with little regard for quality, efficiency or effectiveness. While the 1978 Alma Ata Declaration primary healthcare priorities remain relevant, the world cannot continue to pursue that narrow primary care agenda. The evolving disease burden requires vastly different structures and functions. Globally, primary care services no longer just treat diarrhea and malaria, but more commonly, diabetes, cancer and cardiovascular diseases (Lancet Task Force on NCDs and Economics 2018, WHO 2014). Nonetheless, healthcare systems persist in their focus on episodic health problems that require little follow-up (Kruk et al. 2015). Surging health problems today are chronic, require medical supervision and are costly – to both patients and the system – when left unattended.

These health problems are confronting EMDEs head-on and, as in high-income countries, there is an imperative to reduce inpatient and emergency care for conditions that can be better treated on an outpatient basis. As discussed previously, overreliance on hospital care in many EMDE settings inhibits

the ability of clinicians to monitor chronic conditions, something that patients typically are unaware of and therefore do not value; this places additional burdens on public and private providers to inform and engage patients to ensure adequate interventions. Continued reliance on fee-for-service and line-item budgets for financing healthcare in EMDEs leaves little room to promote quality of care or encourage innovation and change, elements too often neglected in healthcare. Uneven management and the associated lack of monitoring and performance data further inhibit change efforts, and the absence of any form of accountability contributes to allowing outdated models of care to persist.

To manage changes in socio-demographic and epidemiological makeup and to use resources more effectively, a new model of healthcare financing and delivery is required, one that elevates primary care. Trends more generally point to the need for a more sophisticated approach to managing, delivering and paying for healthcare in both the private and public sectors in EMDEs. The ACO model represents a unique opportunity as it has demonstrated benefits for payers, providers and patients alike. Despite its complexities, it offers an adaptable model for countries intending to move towards VBC. With the right planning, implementation and oversight, it could prove a boon to EMDE players committed to shifting to VBC and/or looking for innovative ways to simultaneously control ballooning costs and improve patient outcomes. Considerations for ACOs in the private and public sectors in these settings are discussed below.

ACOs have found an effective formula for achieving value-based care.

ACOs in the Private Sector. Private sector providers and payers can benefit from the ACO model in many of the same ways as in the US. In most cases, the private sector has the advantage of greater flexibility in organization and management, creating greater opportunities for shared risk models that provide incentives for providers to redesign clinical processes that align with a shift to outpatient-focused care. Reaching VBC demands new models of care as well as payment arrangements that drive incentives. ACOs would achieve both, and raising standards and controlling costs would benefit private healthcare.

Private investment can also bolster ACO formation. Creating an ACO often requires significant upfront investment in digital infrastructure, training and hiring of new staff (Houston and McGinnis 2016). The right private sector partners can help diminish these financial and structural barriers to success.

ACOs in the Public Sector. As discussed above, the adoption and expansion of ACOs in the US has been pushed by Medicare and Medicaid, public insurers that do not deliver healthcare services directly to beneficiaries, but instead reimburse private providers who do. They define the goals of ACOs as ensuring “that patients get the right care at the right time, while avoiding unnecessary duplication of services and preventing medical errors” (CMS 2019a). This guidance can be helpful to other governments looking to raise quality and control costs.

First, ACOs offer an entry point for moving toward VBC in publicly-managed and run delivery systems, and in particular in introducing accountability in such systems. Doing this would also require enhanced facility autonomy (see Box 5), as holding providers to account can only be accomplished if they have authority to make decisions. Second, the ACO model offers governments the opportunity to engage the private sector in service delivery aligned with public objectives, as contracting out is best achieved where there are data to oversee and ensure performance, something that publicly-financed ACOs will require. In both cases, ACOs provide the basis for strengthening publicly-financed primary care, specifically for non-communicable and chronic diseases, which will be key moving forward.

In both public ACOs and publicly-financed ACOs, adherence to the four key elements of ACOs outlined above is still relevant, but some elements may pose difficulties due to current circumstances, such as limited data availability, lack of reliance on data for management and the absence of incentives in public service provision. These constraints will have to be addressed thoughtfully in any ACO design and implementation, and may take time to change. For example, when it comes to payment arrangements, the public sector might be better served in the short-term focusing on ways to introduce shared savings

Box 5: Public Provider Autonomy

The ACO model entails strong organizational leadership, and this relies on independent decision-making power. For incentives for cost containment and quality improvement to work, managers must be empowered to make changes to respond to these incentives. This includes decision-making authority over inputs, staffing and processes, as well as the ability to hold individuals accountable for their performance. In many public healthcare systems globally, managers lack this autonomy, and rigid rules prohibit front-line staff from implementing the innovations necessary to bring about desired changes. Such systems will have to transition to grant greater flexibility to managers, matched by stronger accountability, if they are to adopt value-based payment and delivery (Jakab et al. 2002, La Forgia and Couttolenc 2008, Lewis and Pettersson 2009, Saltman et al. 2011).

and autonomy, with less emphasis on shared risks. Moreover, the evolving nature of health problems and healthcare means that the overhauls in the use of data and information systems necessary for ACO functioning will need to occur in all health systems sooner rather than later, even in the absence of ACOs. An ACO structure can help by catalyzing this process – even if it starts with smarter use of paper-based systems.

The nuances and numerous options available for designing an ACO lend themselves to testing before launching, as does the fact that such a pilot could entail trying a new payment system, initiating partnership(s) and contractual arrangements, and adapting and expanding existing IT systems, as well as supporting training and engagement among clinicians and potential partners. Pilots help the learning process and allow problems to be addressed before they become entrenched or too big to change. Pilots of ACO-like arrangements would provide an opportunity to test both the components of and approaches to the VBC model, in order to gain knowledge of how best to design and implement such reforms on a larger scale. In the US, such learning and scaling is currently underway.

Conclusions: ACOs Offer Promise in Attaining VBC

The ACO model is highly adaptable to local circumstances and can accommodate public and private providers and financing, making it appropriate for countries with mixed healthcare markets, and for those in which payment and provision are divided between public and private sectors. It represents a promising means of shifting away from traditional healthcare delivery – in which quality, if acknowledged at all, is often an after-thought – and of rethinking finance and payment arrangements as tools for creating incentives for desirable performance: a new, but important, concept in most healthcare systems.

Creating successful ACOs is not simple in any country, in no small part because it entails a culture shift in healthcare management and service delivery. It requires numerous starting conditions, including, as discussed, targeting incentives to promote behavior change, leveraging innovative payment arrangements to encourage shifts in clinical practice, new models of management and care, and a culture of data generation and use. Yet embracing VBC objectives leads inevitably to consideration of ACOs, as they are one of the few successes in the race to ensure that patients and payers receive not just healthcare, but rather value in healthcare.

Sources:

- Agency for Healthcare Research and Quality (AHRQ). 2018. "Care Coordination." Last updated August 2018. Accessed February 1, 2019. Retrieved from <https://www.ahrq.gov/professionals/prevention-chronic-care/improve/coordination/index.html>
- Ahmed, M.E., Mahdi, T.E. and N.J.O. Ahmed. 2017. Bypassing Primary Health Care Facilities for common childhood illnesses in Sharg-Alneel locality in Khartoum State, Sudan 2015. *Science Journal of Public Health* 5(2): 77-87.
- Akhlaq, A., McKinstry, B., Muhammad, K.B. and A. Sheikh. 2016. Barriers and facilitators to health information exchange in low- and middle-income country settings: a systematic review. *Health Policy and Planning* 31(9): 1310-1325.
- Akin, J.S. and P. Hutchinson. 1999. Health-care facility choice and the phenomenon of bypassing. *Health Policy and Planning* 14(2): 135-151.
- Bailit, M. and C. Hughes. 2011. Key Design Elements of Shared-Savings Payment Arrangements. Issue Brief Pub. 1539, Vol. 20. The Commonwealth Fund.
- Berdofe, A. 2012. "ACO Core Competencies." Accessed February 1, 2019. Retrieved from <https://aaronberdofe.com/2012/01/09/acos-and-ehrs/>
- Berenson, R.A., Upadhyay, D.K., Delbanco, S.F. and R. Murray. 2016. *A Typology of Payment Methods*. Washington, DC: Urban Institute.
- Burns, L.R., Goldsmith, J.C. and A. Sen. 2013. Horizontal and Vertical Integration of Physicians: A Tale of Two Tails. *Advances in Health Care Management* 15: 39-117.
- CareFirst. 2018. "CareFirst PCMH Program Nets \$1.2B in Savings since 2011." December 7, 2018. Accessed February 1, 2019. Retrieved from <https://member.carefirst.com/members/news/2018/06/carefirst-pcmh-program-nets-12b-in-savings-since-2011/>
- Childs, B. 2018. Alternative Payment Models: Five Myths. *Health Affairs Blog* June 21, 2018. Accessed February 1, 2019. Retrieved from https://www.healthaffairs.org/doi/10.1377/hblog20180619.730563/full?utm_term=Alternative+Payment+Models%3A+Five+Myths&utm_campaign=Health+Affairs
- Centers for Medicare and Medicaid Services (CMS). 2017. "Performance Year 2016 Quality Performance and Financial Reconciliation Results for ACOs with 2012-2016 Start Dates." Presentation given on October 19, 2017.
- Centers for Medicare and Medicaid Services (CMS). 2019a. Accountable Care Organizations (ACOs). March 8, 2019. Accessed April 26, 2019. Retrieved from <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/>
- Centers for Medicare and Medicaid Services (CMS). 2019b. Care Coordination Toolkit. Accessed April 16, 2019. Retrieved from <https://innovation.cms.gov/Files/x/aco-carecoordination-toolkit.pdf>
- Department of Health and Human Services Office of Inspector General (DHSS OIG). 2017. Medicare Shared Savings Program Accountable Care Organizations Have Shown Potential for Reducing Spending and Improving Quality. Washington, DC: DHHS.

Dupree, J.M., Patel, K., Singer, S.J., West, M., Wang, R., Zinner, M.J. and J.S. Weissman. 2014. Attention to surgeons and surgical care is largely missing from early Medicare Accountable Care Organizations. *Health Affairs* 33(6): 972-979.

Glickman, A., Dinh, C. and A.S. Navathe. 2018. The Current State of Evidence on Bundled Payments. Penn LDI Issue Brief Vol. 22, No. 3. Philadelphia, PA: University of Pennsylvania Leonard Davis Institute of Health Economics.

Gold, J. 2015. "Accountable Care Organizations, Explained." Kaiser Health News. September 14, 2015. Accessed February 1, 2019. Retrieved from <https://khn.org/news/aco-accountable-care-organization-faq/>

Gottret, P. and G. Schieber. 2006. *A Practitioner's Guide - Health Financing Revisited*. Washington, DC: The World Bank.

Government Accountability Office (GAO). 2018. CMS Innovation Center: Model Implementation and Center Performance. Report GAO-18-302. Washington, DC: United States Government Accountability Office.

Healthcare Transformation Task Force (HCTTF). 2016. Accountable Care Financial Arrangements: Options and Considerations. White Paper. June 2016. Accessed on February 1, 2019. Retrieved from https://hcttf.org/wp-content/.../HCTTF_ACOFinancialArrangementsWhitePaper.pdf

Healthcare Transformation Task Force (HCTTF). 2017. Levers of Successful ACOs. Insights from the Health Care Transformation Task Force. Accessed February 1, 2019. Retrieved from <https://hcttf.org/wp-content/uploads/2018/01/LeversofSuccessfulACOs6.pdf>

Houston, R. and T. McGinnis. 2016. Brief: Accountable Care Organizations: Looking Back and Moving Forward. New Jersey: Center for Health Care Strategies, Inc.

Jabbarpour, Y., Coffman, M., Habib, A., Chung, Y., Liaw, W., Gold, S., Jackson, H., Bazemore, A. and W.D. Marder. 2018. Advanced Primary Care: A Key Contributor to Successful ACOs. Washington, DC: Patient-Centered Primary Care Collaborative (PCPCC) and Robert Graham Center.

Jakab, M., Preker, A., Harding, A. et al. 2002. The Introduction of Market Forces in the Public Hospital Sector. HNP Discussion Paper. Washington, DC: World Bank.

Jasinski, C.F., Rodriguez-Monguio, R., Tonyushkina, K. and H. Allen. 2013. Healthcare cost of type 1 diabetes mellitus in new-onset children in a hospital compared to an outpatient setting. *BMC Pediatrics* 13(55).

Kaiser Family Foundation (KFF). 2019. "Medicare Delivery System Reform: The Evidence Link." Accessed April 16, 2019. Retrieved from https://www.kff.org/medicare-delivery-system-reform-the-evidence-link/?utm_campaign=KFF-2017-November-Medicare-Delivery-System-Reform&utm_source=hs_email&utm_medium=email&utm_content=2&hsenc=p2ANqtz-9ofaaxK89HrTHHKBtRNDfIFTGpnzLE-AeHEunDbQWn67poKjB2LdOLEbcqz3lixCZ1yMLAnHkMIBY7YigDc7G88Otiq

Karkee, R., Lee, A.H. and C.W. Binns. 2015. Bypassing birth centres for childbirth: an analysis of data from a community-based prospective cohort study in Nepal. *Health Policy and Planning* 30: 1-7.

Kash, B. and D. Tan. 2016. Physician Group Practice Trends: A Comprehensive Review. *Journal of Hospital and Medical Management* 2(1:3).

Kirschner, N. No date. "Accountable Care Organization (ACO) 101 Brief Course." Presentation of the American College of Physicians. Accessed February 1, 2019. Retrieved from https://www.acponline.org/system/files/documents/about_acp/chapters/md/kirschner.pdf

- Kruk, M.E., Hermosilla, S., Larson, E. and G.M. Mbaruku. 2014. Bypassing primary care clinics for childbirth: a cross-sectional study in the Pwani region, United Republic of Tanzania. *Bull World Health Organ* 92: 246-253.
- Kruk, M.E., Nigenda, G. and F.M. Knaul. 2015. Redesigning Primary Care to Tackle the Global Epidemic of Noncommunicable Disease. *American Journal of Public Health* 105(3): 431-437.
- La Forgia, G.M. and B. Couttolenc. 2008. *Hospital performance in Brazil: The Search for Excellence (English)*. Washington, DC: World Bank.
- Lancet Global Health Commission. 2018. High quality health systems in the Sustainable Development Goals era: time for a revolution. *The Lancet* 6: e1196-e1252.
- Lancet Taskforce on NCDs and Economics. 2018. Investing in non-communicable disease prevention and management to advance the Sustainable Development Goals. *The Lancet* 391: 2029-35.
- Langenbrunner, J.C., Cashin, C. and S. O'Dougherty (eds.) 2009. *How-to Manuals: Designing and Implementing Health Care Provider Payment Systems*. Washington, DC: World Bank.
- Lewis, M. and G. Pettersson. 2009. Governance in Health Care Delivery: Raising Performance. Policy Research Working Paper 5074. Washington, DC: World Bank.
- Lewis, V.A., Tierney, K.I., Colla, C.H. and S.M. Shortell. 2017. The New Frontier of Strategic Alliances in Health Care: New Partnerships Under Accountable Care Organizations. *Soc Sci Med.* 190.
- Lewis, V.A., D'Aunno, T., Murray, G.F., Shortell, S.M. and C.H. Colla. 2018a. The Hidden Roles that Management Partners Play in Accountable Care Organizations. *Health Aff (Millwood)* 37(2): 292-298.
- Lewis, V.A., Fisher, E.S. and C.H. Colla. 2018b. Explaining Sluggish Savings under Accountable Care. *NEJM Catalyst*. January 29, 2018. Accessed April 26, 2019. Retrieved from <https://catalyst.nejm.org/sluggish-savings-accountable-care/>
- Mathematica. No date. "Case Study: Creating Collaborative and Innovative Learning Systems for Accountable Care Organizations." Accessed February 1, 2019. Retrieved from <https://www.mathematica-mpr.com/our-capabilities/case-studies/creating-collaborative-and-innovative-learning-systems-for-accountable-care-organizations>
- McClellan, M., Kent, J., Beales, S., Macdonnell, M., Thoumi, A., Shuttleworth, B. and S. Cohen. 2013. Accountable Care: Focusing Accountability on Outcomes that Matter. Report of the Accountable Care Working Group. World Innovation Summit for Health (WISH).
- McConnell, K.J. 2016. Oregon's Medicaid Coordinated Care Organizations. *JAMA* 315(9): 869-870
- McWilliams, J.M., Gilstrap, L.G., Stevenson, D.G., Chernew, M.E., Huskamp, H.A. and D.C. Grabowski. 2017. Changes in postacute care in the medicare shared savings program. *JAMA Internal Medicine* 177(4).
- Mechanic, R., Perloff, J., Litton, T., Edwards, K. and D. Muhlestein. 2019. The 2018 Annual ACO Survey: Examining the Risk Contracting Landscape. Health Affairs Blog April 23, 2019. Accessed April 24, 2019. Retrieved from https://www.healthaffairs.org/doi/10.1377/hblog20190422.181228/full/?utm_source=Newsletter&utm_medium=email&utm_content=The+Administration+s+Drug
- Muhlestein, D., Gardner, P., Merrill, T., Peterson, M. and T. Tu. 2014. A Taxonomy of Accountable Care Organizations: Different Approaches to Achieve the Triple Aim. Leavitt Partners. June.

- Muhlestein, D. and M. McClellan. 2016. Accountable Care Organizations in 2016: Private and Public-Sector Growth and Dispersion. *Health Affairs Blog* April 21, 2016. Accessed February 1, 2019. Retrieved from <https://www.healthaffairs.org/doi/10.1377/hblog20160421.054564/full/>
- Muhlestein, D., Saunders, R. and M. McClellan. 2017. Growth of ACOs and Alternative Payment Models in 2017. *Health Affairs Blog* June 28, 2017. Accessed February 1, 2019. Retrieved from <https://www.healthaffairs.org/doi/10.1377/hblog20170628.060719/full/>
- Muhlestein, D., Saunders, R., Richards, R. and M. McClellan. 2018. Recent Progress in the Value Journey: Growth of ACOs and Value-Based Payment Models in 2018. *Health Affairs Blog* August 14, 2018. Accessed on February 1, 2019. Retrieved from <https://www.healthaffairs.org/doi/10.1377/hblog20180810.481968/full/>
- National Academies of Sciences, Engineering, and Medicine (NASEM). 2018. *Crossing the global quality chasm: Improving Health Care Worldwide*. Washington, DC: The National Academies Press.
- NCD Countdown 2030 Collaborators. 2018. NCD Countdown 2030: Worldwide trends in non-communicable disease mortality and progress towards Sustainable Development Goal target 3.4. *The Lancet* 392: 1072-1088.
- NEJM Catalyst. 2017. "What is Value-Based Healthcare?" Accessed Apr 9, 2019. Accessed April, 26, 2019. Retrieved from <https://catalyst.nejm.org/what-is-value-based-healthcare/>
- NHS. 2018. NHS England announces consultation on ACO contracts. January 25, 2018. Accessed April, 26, 2019. Retrieved from <https://www.england.nhs.uk/2018/01/consultation-aco-contracts/>
- NORAC. 2018. First Annual Report: Next Generation Accountable Care Organization (NGACO) Model Evaluation. Report to CMS. Maryland: NORAC at the University of Chicago.
- OECD. 2016. *Better Ways to Pay for Healthcare*. OECD Health Policy Studies. Paris: OECD.
- Oregon Health Authority. 2015. Oregon's Health System Transformation 2014 Final Report. Version 1.4. June 24, 2015. Accessed February 1, 2019. Retrieved from <https://www.oregon.gov/oha/HPA/ANALYTICS-MTX/Pages/HST-Reports.aspx>
- Ouayogodé, M.H., Colla, C.H. and V.A. Lewis. 2017. Determinants of Success in Shared Savings Programs: An Analysis of ACO and Market Characteristics. *Healthc (Amst)* 5(1-2): 53–61.
- Peck, K.A., Usadi, B., Mainor, A., Newton, H. and E. Meara. 2018. How ACOs are Caring for People with Complex Needs. The Commonwealth Fund. Accessed April 9, 2019. Retrieved from <https://www.commonwealthfund.org/publications/fund-reports/2018/dec/how-acos-are-caring-people-complex-needs>
- Pierce-Wrobel, C. and J. Micklos. 2018. How The Most Successful ACOs Act As Factories Of Innovation. *Health Affairs Blog* January 29, 2018. Accessed April 16, 2019. Retrieved from <https://www.healthaffairs.org/doi/10.1377/hblog20180124.514403/full/>
- Porter, M.E. and E.O. Teisburg. 2006. *Redefining Health Care: Creating Value-Based Competition on Results*. Boston, MA: Harvard Business School Press.
- Ryan, A.M., Krinsky, S., Adler-Milstein, J., Damberg, C.L., Maurer, K.A. and J.M. Hollingsworth. 2017. Association Between Hospital's Engagement in Value-Based Reforms and Readmission Reduction in the Hospital Readmission Reduction Program. *JAMA Internal Medicine* 177(6): 862-868.

Saltman, R.B., Duran, A. and H. Dubois (eds.). 2011. *Governing Public Hospitals: Reform Strategies and the Movement Towards Institutional Autonomy*. Geneva: World Health Organization, European Observatory on Health Systems and Policies.

Schulz, J., DeCamp, M. and S.A. Berkowitz. 2017. Regional cost and experience, not size or hospital inclusion, helps predict ACO success. *Medicine* 96(24).

Song, Z. and E.S. Fischer. 2016. The ACO Experiment in Infancy – Looking Back and Looking Forward. *JAMA* 316(7): 705-706.

United Nations General Assembly (UNGA). 2015. Transforming Our World: The 2030 Agenda for Sustainable Development. A/RES/70/1. September 25, 2015.

World Health Organization (WHO). 2014. Global Status Report on non-communicable diseases 2014. Geneva: WHO.

Woodcock, E. and C. Crotty. 2015. IPAs: Joining Forces to Retain Independence. *Medical Economics* 92(7): 47-50.

World Bank. 2017. *A Fair Adjustment: Efficiency and Equity of Public Spending in Brazil: Volume 1 - Overview (English)*. Washington, DC: World Bank.

Yellapa, V., Devadasan, N., Krumeich, A., Pant Pai, N., Vadnais, C., Pai, M. and N. Engel. 2017. How Patients Navigate the Diagnostic Ecosystem in a Fragmented Health System: A Qualitative Study from India. *Global Health Action* 10(1).

Zeidler, J., Mittendorf, T., Vahldiek, G., Zeidler, H. and S. Merkesdal. 2008. Comparative cost analysis of outpatient and inpatient rehabilitation for musculoskeletal diseases in Germany. *Rheumatology* 47: 1527-1534.

Aceso Global is a non-profit organization that catalyzes global healthcare performance and innovation. We provide strategic **healthcare advisory services** in low- and middle-income countries to design and deliver highly customized, evidence-based solutions that address the complex nature of healthcare systems. We are committed to promoting strong health systems and affordable, **high-quality care** that produce **better health outcomes** for all.



1616 P Street NW
Suite 103
Washington, DC 20036

www.acesoglobal.org