

Pediatric Accountable Care Organizations: Insight From Early Adopters

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Partly in response to incentives in the Affordable Care Act, there has been major growth in accountable care organizations (ACO) in both the private and public sectors. For several reasons, growth of ACOs in pediatric care has been more modest than for older populations. The American Academy of Pediatrics collaborated with Leavitt Partners, LLC, to carry out a study of pediatric ACOs, including a series of 5 case studies of diverse pediatric models, a scan of Medicaid ACOs, and a summit of leaders in pediatric ACO development. These collaborative activities identified several issues in ACO formation and sustainability in pediatric settings and outlined a number of opportunities for the pediatric community in areas of organization, model change, and market dynamics; payment, financing, and contracting; quality and value; and use of new technologies. These insights can guide future work in pediatric ACO development.

Increasing numbers of organizations have moved to become accountable care organizations (ACOs), partly in response to changes from the Affordable Care Act of 2010 (ACA). This growth also reflects public and private payer interest in improving quality while controlling costs. The term “accountable care organization” was introduced in 2006 with the premise that all providers involved in the continuum of care should share accountability for quality and costs.^{1,2} The ACA subsequently codified much of the ACO concept leading to high profile initiatives, including the Medicare Shared Savings, the Pioneer ACO, and the Next Generation ACO programs.³

A typical ACO initiative might involve a physician group and hospital collaborating to integrate care delivery efforts in conjunction with a risk-bearing contract with a purchaser. However, the ACO concept does not

specify provider configurations. More commonly, an ACO is characterized by its triple aim objectives: lower costs, improved health, and improved patient experience.⁴ Fundamental changes to achieve this triple aim include realignment of the organization’s financial and clinical interests to (1) bear financial risk for the health care needs of a defined population, (2) coordinate and oversee the clinical provision of care across the continuum of health care services, and (3) provide measured outcomes of both cost and population health.^{5,6}

Over 840 entities are currently organized to make this transition. The number of ACO-covered lives is projected to increase to 105 million by 2020 compared with an estimated 23 million as of December 2015.⁷ Much of the initial growth came from the Medicare Shared Savings program, which is mainly focused on better care management for elderly populations,

abstract

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Dr Perrin advised the Leavitt–American Academy of Pediatrics (AAP) collaboration, chaired the accountable care organization (ACO) summit, conceptualized the paper, and drafted the initial manuscript; Mr Zimmerman guided the Leavitt–AAP collaboration, organized the ACO summit, helped to conceptualize the paper, and reviewed and revised the manuscript; Drs Hertz and Johnson provided information for the case studies, participated in the ACO summit, and reviewed and revised the manuscript; Mr Merrill carried out the case studies and their synthesis and reviewed and revised the manuscript; Mr Smith oversaw the Leavitt team and associated reports and reviewed and revised the manuscript; and all authors approved the final manuscript as submitted.

DOI: 10.1542/peds.2016-1840

Accepted for publication Nov 11, 2016

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PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

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To cite: Perrin JM, Zimmerman E, Hertz A, et al. Pediatric Accountable Care Organizations: Insight From Early Adopters. *Pediatrics*. 2017; 139(2):e20161840

with clear opportunities for short-term savings through reduced use of inpatient and other high-acuity settings. In part, the emphasis on Medicare beneficiaries reflects the lack of specific ACA attention to pediatrics and the difficulties in achieving equivalent short-term savings for children's health care.

Many ACO model characteristics are compatible with pediatric care, including the emphasis on patient-centered (and family-centered) care, care coordination, a strong primary care base, quality measurement focused on improved outcomes, and population management. However, critical characteristics of the pediatric population distinguish pediatrics from programs for older populations and lead to specific structures for pediatric ACOs. The demographics of children and youth are highly diverse, much more so than for any other age group, which has implications for cultural and language issues in care.⁸ Children have higher rates of poverty than any other age group, which influences the prevalence and severity of disease and access and response to treatment.⁹ Preventing long-term consequences of adverse childhood experiences creates a special opportunity for pediatric ACOs, especially if they can engage community resources to support families. Children and youth face prevalent chronic conditions, especially obesity, asthma, mental health conditions (eg, attention-deficit/hyperactivity disorder [ADHD], anxiety, and depression), and neurodevelopmental conditions (autism and adverse outcomes of severe prematurity),¹⁰ as well as a large number of individually rare chronic conditions, many of which require access to complex subspecialty management, often at some distance from home communities, which has implications for network composition.¹¹ Adults, especially parents, strongly influence the health and well-being of children.

TABLE 1 Glossary

Term	Definition
PMPM	Payment provided based on number of enrolled patients on a monthly basis
Shared savings	Where practice arrangements lead to lower costs, payers and providers may share savings
Global payment	Fixed per capita payment that covers all health care services over a set time period
Population health	The health status of a group of individuals, including the distribution of outcomes within the group
Value	Improved quality or outcomes (often divided by cost)
Capitation	Payment based on the number (hence, per capita) of patients attributed to the provider
CMMI	A program of the Center for Medicare and Medicaid Services arising from the ACA provisions to support innovations in health care organization and financing
CIN	A health care system (both inpatient and outpatient clinicians) working together, using evidence-based protocols and measures, to improve patient care, decrease cost, and demonstrate value to the market

Children whose parents have health insurance are also more likely to have insurance.¹² Finally, the trajectories for improved outcomes and lower costs are often long-term, with short-term savings less achievable.

The ACA included provisions for a Pediatric ACO Demonstration Project,¹³ which never achieved funding, and Centers for Medicare and Medicaid Services has not directly supported development of a pediatric ACO model. The diversity of state Medicaid management, in contrast with federal oversight of Medicare, has also hampered the growth of pediatric ACOs. Nonetheless, the pediatric community has adapted the concept to better fit the unique aspects of the pediatric population. Limited systematic information on pediatric ACOs led to a collaboration between the American Academy of Pediatrics (AAP) and Leavitt Partners, LLC (LP), a national health care intelligence firm, to gather information on current and emerging pediatric organizations becoming accountable for the quality and cost of care they provide. This report describes the results of that collaboration.

LP has a long history of monitoring the growth and diffusion of ACOs, their characteristics, and main

generalizable observations. A recent LP report described the background, growth, and common themes in Medicaid ACOs,¹⁴ and, in a project with the AAP, LP conducted a more in-depth scan of 8 Medicaid ACOs, highlighting their use of pediatric quality measures and innovative payment models.¹⁵ Key scan findings included the use of enhanced per member per month (PMPM) payments (see Table 1) in most Medicaid programs, all of which have begun some shared savings and a move to global payments. States are looking increasingly to population health as a component of reform activity. States, however, have found that shareable, meaningful data can be hard to obtain, limiting opportunities for state models to promote nationwide reform.¹⁴

The AAP-LP collaboration in 2014 explored existing pediatric ACO models to gain stronger understanding of the growth of pediatric efforts within the broader ACO movement. The work included in-depth case studies of pediatric ACOs to characterize key structures and processes. The initial case selection included 18 self-identified pediatric ACOs from the larger ACO scan that LP maintains. The AAP-LP team chose 8 ACOs

TABLE 2 Pediatric ACO Case Studies

Name	Market	Providers Involved	Year Established	Payer Mix	Payment Arrangement(s)	ACO Lives
University Hospitals Rainbow Care Connection	Cleveland, OH	UH-employed + community physicians	2012	Medicaid	Shared savings	100 000
Children's Mercy	Kansas City, MO	Children's Mercy Hospital-employed + community physicians	2012	Medicaid	Capitation, shared savings	100 000
Advocate Health	Chicago, IL	Advocate Health System, Advocate Physician Partners	2014	Medicaid	Care management, shared savings	180 000
Colorado Pediatric Collaborative	Denver, CO	CPP, Children's Hospital Colorado, Physician Health Partners	2012	Aetna, Anthem	Care management	200 000
The Children's Care Network	Atlanta, GA	Children's Healthcare of Atlanta, Primary Care and Subspecialty Pediatric Practices	2014	Medicaid	Shared savings	N/A

NA, not available.

broadly representing varied health care markets (eg, consolidated or fragmented), structures (eg, clinically integrated network [CIN], physician-hospital collaboration, or physician-only), and market entry timing. The team contacted the 8 sites and determined that 5 (1) fit an ACO model (ie, the organization bore some risk for the cost and quality of a specific population), and (2) were prepared for in-depth leadership interviews. The 5 ACOs were: (1) University Hospitals Rainbow Care Connection (UHRCC; Cleveland, OH); (2) Children's Mercy Integrated Care Solutions/Pediatric Care Network (Kansas City, MO); (3) Advocate Accountable Care (Chicago, IL); (4) Colorado Pediatric Collaborative (CPC; Denver, CO); and (5) The Children's Care Network (TCCN) of Atlanta (Atlanta, GA).

The team conducted multiple interviews with clinical and administrative leaders of these organizations focusing on each site's background and market context, payment arrangements and risk sharing, clinical strategies and care coordination, and experience and outcomes. Key informants from each site reviewed case studies for needed revisions. The LP team used a mixed-methods approach to analyze the interview transcripts and create categories for additional review

by the joint AAP and LP group and consensus on themes.

After completion of the 5 case studies, LP and the AAP convened a summit with leadership from the 5 ACOs to review the history, development, administration, and management of pediatric ACOs and to determine useful lessons for the broader pediatric community. The ACO summit included overviews from each site as well as the report from the study team of themes from the qualitative work. Additional participants included representatives from other pediatric ACOs, health policy organizations, and foundations. Thus, the summit provided the opportunity to expand discussion of the initial themes and gain consensus among the various ACOs represented. This report describes the 5 sites (Table 2), summarizes key findings from the case studies and summit, and outlines opportunities for the pediatric community.

Participating Sites

University Hospitals Rainbow Care Connection (RCC)

Established in 2012, UHRCC, the University Hospitals (UH) Health System Medicaid pediatric ACO, includes a network of >160 employed and independent pediatricians spanning 8 Ohio counties. A Center

for Medicare & Medicaid Innovation (CMMI) award for its physician extension team (PET) helped UH establish its infrastructure to improve care quality, enhance access, and ensure financial sustainability. Through PET, UHRCC educated local physicians on practice redesign to strengthen quality and patient access. Although not directly involved in the ACO, UH pediatric subspecialists are integral to PET clinical programs. Initial shared-savings arrangements with Ohio Medicaid-managed care plans focused on specific areas (emergency and pharmacy), but UHRCC is now transitioning to cover total cost of care. UHRCC's connection with the broader UH Health System ACO infrastructure allows UHRCC to secure shared-savings arrangements with commercial plans representing ~300 000 pediatric patients. UHRCC has developed programs for behavioral health integration, multidisciplinary care teams for children with medical complexity, and telehealth approaches to help decrease avoidable pediatric Medicaid emergency department visits. UHRCC has gone beyond standard Healthcare Effectiveness Data and Information Set measures to include long-term metrics, such as literacy, positive parenting, and safe sleep.

Children's Mercy Pediatric Care Network

Children's Mercy Pediatric Care Network (CMPCN) has managed Medicaid beneficiaries since 1996, first as a health plan, isolated from hospital operations, and now as an integrated delivery system. CMPCN includes 46 practice locations and 200 primary care physicians, serving a primarily Medicaid population in and around Kansas City, where it is accountable for cost and quality of care for 85% of the region's Medicaid-covered children. Because of its origin as a health plan, CMPCN takes on responsibility for delegated medical management, including traditional insurer functions, such as use, disease, and case management programs. CMPCN has capitated arrangements (covering 85 000 lives) and shared-savings arrangements (covering 15 000 lives) with Medicaid managed care organizations. Network providers receive a PMPM payment for engaging in ACO initiatives and additional amounts for quality outcomes they achieve. Subspecialists are not currently engaged in any value-based payment arrangement. The network provides intensive medical home transformation support to practices and has also found success in giving network physicians autonomy to focus on areas of their choosing.

Advocate Health

Advocate is the largest provider of pediatric services in Illinois. Its first ACO contract began in early 2011 with Blue Cross Blue Shield of Illinois. To transition more Medicaid patients into care management, Illinois created a new progressive risk-based model for providers called an accountable care entity (ACE). Advocate's ACE, ~80% children, is working to expand its pediatric care management to meet state requirements. Advocate's ACE payments include a PMPM care management fee, plus the

Medicaid rate, over an 18-month contract, after which it will move to essentially full risk. With changing state requirements, Advocate decided to partner with a health plan in a fee-for-service arrangement for another 1 to 2 years before assuming risk. Subspecialist involvement has been minimal in past years, but the agreement with Advocate's physician arm requires all network providers to treat patients under all of Advocate's contracts, including Medicaid. Participation in ACE has highlighted the issue of subspecialty involvement, mostly through efforts to standardize care procedures.

Colorado Pediatric Collaborative (CPC)

The CPC formed in 2011 through a partnership among Colorado Pediatric Partners (CPP) independent practice association, the Children's Hospital of Colorado, and Physician Health Partners, a health care management group. Although a new entity, CPP grew out of a health maintenance organization-era risk-contracting initiative that CPP and Children's Hospital of Colorado originally created to provide pediatricians a voice in cost decisions with payers and hospitals. Now a pediatric ACO serving >200 000 patients, CPC's mission is to help pediatricians transition to focus on quality rather than just costs while becoming competitive for value-based payment contracts. Over 200 physicians, including hospital-based subspecialists and predominantly independent primary care providers, participate in the network, which has extended the opportunity to join to all of Colorado's pediatric clinicians. Participating providers must be willing to collect and submit quality and cost data for analysis, participate in accountable care coaching, and contribute to discussions that improve the model. Peer-to-peer accountable care and multidisciplinary quality improvement teams encourage population health management

tools. Over 100 participating physicians have also received part 4 maintenance of certification credit. Two care management commercial contracts with provider incentives support CPC's quality focus on asthma, immunizations, prevention, obesity, and populations with special and behavioral health needs. The organization is working toward risk-sharing and potential public payer partnerships in the near future.

The Children's Care Network (TCCN)

TCCN was formed in 2014 to create a physician-led, clinically integrated network to improve and strengthen pediatrics in metro Atlanta. TCCN includes Children's Healthcare of Atlanta, a pediatric health system, and private primary care and subspecialty pediatric practices across Atlanta. TCCN is a nonprofit entity, capitalized by the hospital system, governed by a volunteer board representing all participants. This collaboration comes from decades of evolution within the Atlanta market with all participants now coming together to participate in value-based contracting. In its first 18 months, TCCN enrolled 1200 physicians, implemented a population health management tool across all practices, executed an incentive-based contract with a Medicaid managed care organization, and developed quality benchmarks for primary care and subspecialty groups. Newly established data flows allow TCCN to examine community-patient interaction and identify any overuse of services like imaging and testing. Risk sharing will evolve as the CIN builds its evidence base for commercial contracts. Current payment arrangements include "wrap-around" contracts with pay-for-performance aspects, which TCCN expects to transition toward greater risk over time.

These 5 ACOs reported both moral and strategic drivers for entering into new payment and practice

arrangements. Leaders expected that ACO formation would improve care and access and indicated more interest in population health improvement than cost savings. Participants also acknowledged that the changing health care landscape is leading toward value-based payment as a standard payment practice. All sites noted the interest of pediatricians for inclusion in the larger conversation influencing policy changes. The AAP-LP team categorized key interview findings into 4 main themes: (1) payment, financing, and contracting; (2) organization, model change, and market dynamics; (3) quality and value; and (4) use of new technologies.

Payment, Financing, and Contracting

All participating sites noted the need for capital to support the clinical transformation needed to become ACOs. Hospitals filled this gap, providing substantial initial financing, especially for infrastructure, staffing, network establishment, data collection and management, and linking with physician groups. In some cases, specific CMMI project or state innovation grants provided key early financing. A current concern is determining how to pay back early hospital investments. Market share varied across the sites. Some providers had a majority of the market; others faced more competition.

The 5 sites contracted with a variety of payers; all participants had Medicaid contracts either directly with the state or through a managed care organization. All sites had some form of value-based reimbursement, with various levels of risk assumption. Although 1 ACO had capitated, full-risk payment arrangements, the other 4 had only shared-savings or care management arrangements. For ACOs, shared-savings and care management

payment models are considered as a step to provider risk-bearing. These less advanced payment models incent quality reporting and engage providers in cost-reduction efforts without risking substantial financial losses. However, once providers are comfortable bearing financial risk, moving to capitated payments gives the ACO greater flexibility to make investments independent of fee-for-service, as well as the potential to earn significantly greater financial rewards. One observation was that value-based contracting with Medicaid was most effective when most medical expenditures fell within the purview of the physician-hospital organization. Sites also found that ACO financing based solely on state Medicaid contracts carried the risk of unpredictable changes in a state's budget. Some sites found it helpful to partner with adult-oriented networks when approaching payers, particularly for commercial contracts. Yet, adult and pediatric care have such different goals and incentives that payers may not have the staff or resources to address both child and adult care, placing the pediatric components at risk, whereas contracts emphasize the greater opportunity arising from costlier adults. Furthermore, the mental health conditions that impact the cost of pediatric care differ and include autism, ADHD, and maternal depression. Failure to support initiatives addressing these morbidities jeopardizes ACO success.

Organization, Model Change, and Market Dynamics

All 5 sites had previous experience in payment experimentation, clinical integration, and large group negotiations. In some cases, public or private payers provided incentives for pediatric care consolidation. All 5 sites considered physician (pediatric) leadership critical to ACO evolution, built on a strong hospital financing base. Some ACOs supported medical home recognition for practices,

although most found the concepts and processes of medical home adoption more helpful than the administrative rigors of achieving recognition.

All sites considered care management central and implemented use of pediatric-specific case managers, recognizing that generic or adult-oriented managers cannot address pediatric cases adequately. Case managers assist with multiple services including, but not limited to, educating on appropriate use of health care resources, appointment scheduling, linking to community services, transportation needs, resources for medication discounts, linking to other health providers (eg, dietitians, behavioral health therapy), and addressing the needs of family members whose health may also impact the index patient. Care management savings arose from better management of children with complex care needs, and all sites had methods for identifying such children and using care coordination to decrease unnecessary emergency department and hospital use. For example, CMPCN reported a nearly 12% drop in emergency department use and 20% drop in inpatient use from July 2012 to June 2014. Early results indicate that UHRCC also succeeded in reducing unnecessary emergency department visits while achieving high provider satisfaction. Challenges obtaining comprehensive Medicaid claims data have, however, limited UHRCC's ability to report detailed outcomes. Some sites focused on high-volume conditions, such as asthma; all had begun work on behavioral health. Project leaders considered reintegration of behavioral health in primary care critical, although most were unsure of the economic implications. Most ACOs coached primary care clinicians on care management and subspecialty referral practices as part of practice change.

Quality and Value

All sites used quality assessment to help drive transformation, providing training and ongoing coaching for physicians and nurses in quality assessment and improvement. Prevalent assessments included preventive services as well as process measures for common chronic conditions (especially asthma and ADHD), emergency department use, and some early childhood measures. All noted the need for pediatric-specific measures as adult population measures do not work for pediatrics. They also noted clinicians' interest in newer measures that better reflect the outcomes of pediatric care and social determinants of health, such as school readiness at age 5, literacy at age 8, and school graduation. All sites called for rethinking the definition of value in pediatric care. The discussion of value and metrics focused both on the need for a consistent and manageable number of quality measures and the importance of including long-term outcomes in defining value for pediatrics.

Sites noted real difficulties in obtaining adequate data for quality measurement, as well as general use and productivity data. In particular, all sites experienced major difficulties with Medicaid encounter data, even where the state Medicaid agency had a strong commitment to provide such data. In part, these problems reflected limited data management capacity in many Medicaid agencies and they also reflect, in part, the use of managed care intermediaries who had little incentive to provide needed data. Additionally, the diverse formats and sources of Medicaid claims make analysis difficult. All sites noted that inadequate data create significant barriers for effective practice change.

Use of New Technologies

Health information technologies have been critical to help design and manage practice change,

TABLE 3 Opportunities To Support Pediatric ACO Development

Develop a Pediatric Framework For ACO Development
Organization, model change, and market dynamics
Help members influence evolving payment and delivery models
Disseminate best practices
Define structures and process that work – eg, care coordination, population management
Payment and financing
Develop pediatric-specific financial model
Support communication with payers and about strategies to finance transition
Quality and value
Need for pediatric-specific measures – including long-term outcomes
Recommend a small number of measures for use by multiple payers
New technologies
Address pediatric-specific components in telehealth, mobile health, and others and monitor their impact
Continue to develop standards for pediatric EHR

including in pediatrics. Pediatric ACO development needs systems to obtain, aggregate, and analyze data from multiple electronic record platforms in practices, hospitals, and payer datasets. Hospitals typically finance these systems. All sites noted that a lack of specific design for pediatric population data collection or analysis limited effective population management. Sites used new technologies to enhance case management. The low volume of children with complex conditions in individual practices in part led to the use of telemedicine. One site innovated through using kiosks to improve low-income neighborhood patient access to acute care. Kiosks in community pharmacies linked directly with the central hospital and allowed telehealth consultations and decreased emergency department use.

KEY SUMMATIVE FINDINGS

The environmental scan and case studies informed the summit topics, which included quality metrics, payment, clinical integration, special populations, physician leadership, market dynamics, and practice transformation. In addition, a set of policy implications arising from the case studies helped to start the discussion. These policy items addressed: the opportunity for the AAP to help pediatricians engage with ACOs in their communities; the need for standardized quality

metrics specifically targeting the pediatric population; the importance of a value proposition specific to pediatrics to share with payers, purchasers, regulators, policy makers, communities, and families; the need for physician leadership in ACO development; and the need for pediatricians to embrace and shape health care market trends and lead future change in practice.

IMPLICATIONS

Findings from the LP–AAP collaboration, including the interviews and summit, although not reflecting official AAP policy, can help guide ongoing pediatric efforts in ACO development (Table 3). A central opportunity for the AAP, with its partners, is to develop a framework for pediatric ACOs and facilitate dialogue among groups moving toward ACO formation. The AAP could create member learning opportunities to recognize the relevance and importance of having a voice at the table and communicating and sharing ideas with other industry providers.

We group opportunities by the 4 main report areas.

Organization, Model Change, and Market Dynamics

1. The AAP can serve as a resource to members seeking to participate and influence evolving payment

and delivery models. The AAP could make materials on pediatric ACO development broadly available and help disseminate best practices. This work should account for variations in stages of physician organization and create learning opportunities among groups in similar situations.

2. A pediatric ACO framework should include care strategies proven effective for pediatric populations, such as care management. The framework should also describe proper referral patterns in accountable care and aid primary care providers and subspecialists to understand their roles in population management. The framework should also endorse integration of behavior health and attention to social determinants in practice.
3. The AAP and its collaborators can explore different leadership structures and provide members information on which correlate with success.
4. The AAP and others could host a “think outside the box” series, showcasing successes and failures in ACO formation.

Payment, Financing, and Contracting

1. Pediatrics needs its own financial model that accounts for the long-term investment opportunity and the thin margins for short-term savings.
2. The AAP can equip its members with the tools to communicate with payers in various collaborative settings and offer guidance on relationships where physicians are turning to hospitals for help as well as alternative models for financing practice transition.
3. The AAP can provide resources to members to help them lead under collaborative situations and joint contracting situations. The AAP can also help members

collaborate as needed with larger “adult” systems and encourage multipayer demonstrations.

Quality and Value

The pediatric community should advocate that payers include quality measures that assess overall long-term health and long-term savings with life-course measures among those used. Measures must be specific to pediatric populations. The community should also advocate for an all-payer consensus on a consistent and small number of quality measures.

Use of New Technologies

New technologies should have pediatric-specific components or modules. The AAP can lead in supporting pediatric standards for new technologies and monitoring their use in clinical settings. Similarly, the AAP should continue its work in developing pediatric standards for electronic health records (EHRs).

CONCLUSIONS

This review leads to generally applicable recommendations for the pediatric community that may enhance the growth of pediatric ACOs and lead to consistency, common training, and support in practice coaching and team development. The need for technologies that improve EHRs, data management, telehealth, and mobile/wireless health also seems clear, along with the benefits of common, standardized measures across ACOs. Finally, collaborative advocacy for appropriate payment will drive efficiencies in pediatric care.

Whether the Centers for Medicare and Medicaid Services and CMMI continue innovations in payment and organization, the private sector and many state Medicaid agencies have interest in value-based care. Pressure on state Medicaid budgets and commercial insurance rates will continue to spawn value-based payment methods that

shift responsibility from payers to providers, ensuring the need for pediatric ACOs. The newly announced CMMI Comprehensive Primary Care Plus initiative represents another new model of alternative payment.¹⁶ The pediatric community should work to ensure that these developments integrate pediatric care and are designed to improve care for children, youth, and families.

The AAP, through its Task Force on Pediatric Practice Change, has taken on pediatric practice transformation as a major activity, emphasizing change and the growth of pediatric team care, payment reform for pediatrics, new and consistent measures for pediatric care, and harnessing new technologies to best support pediatrics.¹⁷ This AAP initiative identifies core elements of practice change and payment reform that speak directly to population health and ways that ACOs and other innovative models can address these changes.

ABBREVIATIONS

AAP:	American Academy of Pediatrics
ACA:	Affordable Care Act
ACE:	accountable care entity
ACO:	Accountable Care Organization
ADHD:	attention-deficit/hyperactivity disorder
CIN:	clinically integrated network
CMMI:	Center for Medicare and Medicaid Innovation
CMPCN:	Children’s Mercy Pediatric Care Network
CPC:	Colorado Pediatric Collaborative
CPP:	Colorado Pediatric Partners
EHR:	electronic health record
LP:	Leavitt Partners, LLC
PET:	physician extension team
PMPM:	per member per month
TCCN:	The Children’s Care Network, Atlanta
UHRCC:	University Hospitals Rainbow Care Connection

FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: This work was supported by an internal grant at the American Academy of Pediatrics. University Hospitals Rainbow Care Connection was supported by Funding Opportunity No. CMS-1C1-12-0001 from the Centers for Medicare and Medicaid Services, Center for Medicare and Medicaid Innovation. The contents of this article are solely the responsibility of the authors and do not necessarily represent the official views of the US Department of Health and Human Services or any of its agencies.

POTENTIAL CONFLICT OF INTEREST: Dr Johnson is currently with Valence Health, an Accountable Care Organization (ACO) consulting firm. At the time of this study, he was at Children's Mercy Hospital in Kansas City, MO. Mr Merrill and Mr Smith are employees of Leavitt Partners, a firm assessing and consulting on ACO development. The other authors have indicated they have no potential conflicts of interest to disclose.

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Pediatrics 2017;139;

DOI: 10.1542/peds.2016-1840 originally published online January 31, 2017;

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James M. Perrin, Edward Zimmerman, Andrew Hertz, Timothy Johnson, Tom Merrill
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