The evolution of value-based care for pediatrics

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Value-based care has evolved differently for pediatric versus adult systems of care and clinically integrated networks (CINs) for children's hospitals look different in nearly every market. While differences abound, pediatric CINs have had to overcome similar challenges, including how to best engage providers, how to deliver evidence-based, high-quality care, how to position the CIN to be strategically relevant in the shadow of larger adult CINs and how to evolve and sustain their networks. Over the past five years, the Pediatric Care Network (PCN) has grown its membership, executed value contracts, advanced care coordination initiatives and quality coaching to improve pediatric health across Colorado. The network has experienced and overcome many challenges along its journey and despite its early successes, still has much more to accomplish in partnership with its highly engaged and committed pediatric primary care and specialist providers.

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Introduction

Since the dawn of value-based care, children's hospitals and pediatric providers have recognized that value-based care looks dramatically different for pediatric and adult health care. Children are predominantly healthy and managing health care resources, utilization and total cost of care for kids is inherently less predictable and more difficult than for chronically ill adults and the elderly. Pediatric value-based care is largely centered on prevention, the impact of which is difficult to measure. The outcomes of preventive care (i.e., the absence of disease and the resulting cost savings) are realized in the long term and can take many years to pay off.[1,2] Additionally, given geographic, market and organizational differences, pediatric value-based models at each children's hospital also vary considerably from each other.

While differences abound, pediatric CINs share several important goals, including (i) network adequacy through membership expansion to include the leading, high-quality pediatric groups in the region, (ii) development of value-based contracts with a growing number of attributed lives, (iii) care coordination initiatives to engage providers and integrate care across the continuum of care, and (iv) practice transformation through quality coaching to achieve the best outcomes and results for children.

Children's Hospital Colorado is no exception. In its first 4 years, our Pediatric Care Network (PCN) grew membership dramatically, executed several value-based contracts, and advanced care coordination and quality coaching services to improve the quality and health of children in the region. Health plans have taken notice. One health plan rated the PCN the top-quality network in the region for the last 11 years. Another plan ranked the PCN the best quality performing network, adult or pediatric, in Colorado. A third started a national pediatric pilot with the PCN and found the network achieved 100% of the quality gate in year one.

While many pediatric CINs have achieved high-quality performance, they all must overcome several difficult and similar challenges, including (i) developing an attractive approach to engage providers in the network, (ii) designing well-coordinated and high-quality pediatric care, and (iii) positioning the CIN to be relevant and essential in value-based care.

In this paper, we explore each of these three challenges – the problems we encountered, the approaches we developed to overcome these challenges, and the results we achieved. In the final chapter, we describe where we intend to go from here and what we believe will be important for our continued success.

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Chapter 1: engaging providers

Problem Statement: Our initial focus in building the PCN was largely centered on addressing the challenge of securing network adequacy and fostering physician leadership in primary care. Children's Hospital Colorado doesn't employ any physicians, rather, our medical staff is made up almost entirely of faculty from the University of Colorado School of Medicine (CU SoM). With only ~5% of the CU SoM faculty being primary care providers, the vast majority of the pediatric primary care in Colorado is provided by small independent general pediatric practices. It was paramount that we align with these independent pediatricians around an agreed upon care model to advance our clinical integration strategy and build our network.[3]

During the many months, and dozens of face-to-face meetings with our community providers, a clear picture of what was important began to emerge, and the value proposition came into focus

Historical attempts and failures in alignment and value-based initiatives between Children's and the many disparate stakeholders also added a layer of complexity to the already difficult task of building a new pediatric CIN. Those prior starts and stops contributed to significant trust barriers we had to overcome with the community providers.

Additionally, market competition through mostly adult networks had created an environment where many practices were already participating in, and getting paid by other networks, some with contractual exclusivity clauses, making it difficult for us to recruit those practices into the PCN.

PCN Approach: In 2014 we set out to establish a pediatric CIN that would enable us to provide higher quality, more coordinated care while containing costs. A CIN that would enable us to not only participate in pediatric value-based contracts but define what "value" means. Engaging the independent pediatricians and fostering physician leadership was the first step. We needed pediatricians to embrace and help shape market trends toward value-based care.[4] Our previous failures in this space meant that we had to regain their trust. Initially, the PCP's felt that Children's was building a network with the true intention of full acquisition and employment. We learned quickly that we first needed to pause and listen, understand their needs, and then develop a value proposition that worked for all parties. We were persistent, taking our time to purposefully develop a network with independent PCP leadership, input, and buy-in. During the many months, and dozens of face-to-face meetings with our community providers, a clear picture of what was important began to emerge, and the value proposition came into focus :

- A pediatric specific CIN with pediatric quality metrics and programs, and the possibility of truly defining "value" in pediatric value-based care
- A physician-led and governed network with a focus on quality and preparing for risk-based contracting
- Protection from narrow network exclusions for all pediatric providers
- A strengthened medical home within the independent practice model
- An opportunity for true partnership and collaboration in building the CIN, rather than having a fully developed model presented to them.

Results achieved

Our efforts and pre-work paid off, leading to 20 community practices and the CU SoM joining the network at launch in January of 2017. From there, the PCN grew quickly, expanding up to 36 independent primary care practices with over 350 PCP's, 1,100 specialists and 300,000 total attributed pediatric lives. Over 110,000 of these lives are currently managed in value-based contracts. We established a governance structure that is truly physician-led, with 25 pediatricians, 7 specialists, and 50+ practice staff volunteering their time across the PCN Board and Committees.

From there we shifted focus to ongoing engagement of practices and physicians. Each PCN practice is required to establish an internal quality improvement team, led by a physician champion, care coordination lead, and administrative lead that meet monthly with their PCN Quality and Practice Transformation Coach. We've also evolved our communication tactics with practices over time to include: monthly roundtable calls where anyone in the network can join in a townhall format to discuss pressing issues in our community and their practices, weekly Friday update

emails, monthly newsletters, monthly "Data Base" calls facilitated by our analytics team, and our annual membership meeting for all PCN members to celebrate the prior year's successes.

Perhaps the most telling evidence of the efficacy of our ongoing engagement efforts, is how independent providers frequently volunteer to promote the PCN to other prospective practices, the media, and even Children's Board and management team. The PCN has evolved into a highly engaged, community-driven network that is actively reforming care for kids.

Chapter 2: designing well-coordinated, high quality-pediatric care

Problem Statement: The transition to value-based care necessitates a focus on outcomes, both in the form of quality performance and cost containment. Value is commonly defined as the ratio of the two, yet different stakeholders weigh the numerator (quality) and denominator (cost) differently.[5] This difference in interpretation of value puts pressure on pediatric CINs to prioritize, select and report on meaningful quality initiatives that improve child health, but that also satisfy contractual requirements dictated by the payers. Those pressures create a challenging and ongoing dynamic in the development and evolution of a CIN's quality work.

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For the PCN, the difficulty is prioritization and balance. There are hundreds of pediatric measures in use. Each payer using a different set, or different definitions for similar measures. With poor agreement about what the true indicators of improved pediatric health are, and the limitations with data integration and analytics, we often resort to measuring what we can easily measure, instead of the things that matter.[3] We had to ask ourselves: how do we effectively allocate PCN resources to improve quality, and focus on population health initiatives that enhance the clinical care for the populations we serve, while also performing well in our value-based contracts? Furthermore, how do we standardize and disseminate programs and best practices, train our providers, and track and report performance across 37 different practices with varying degrees of resources, staffing, and capital to dedicate to the effort?

PCN Approach: We approach quality with a few questions in mind. First, is what we're contemplating the right thing to do for the patient? Will it advance the health and well-being of the patients and families we serve? From there, we ask, what problem are we trying to solve? How does the particular quality initiative or measure in question either align, or conflict with our value-based contracts, co-management programs, State-led quality transformation initiatives, etc.? And finally, do we have the resources (both at the network level and in our practices) and data capabilities to support the initiatives?

That is a lot to consider, but we simplify by focusing on initiatives and measures that we believe are most important and impactful. We start with a foundation of a strong well care program, then immunizations, asthma, and mental and behavioral health. Recently, we've started to mature in our approach to social determinants of health (SDOH), true population health management and transitions of care. We also monitor our performance across our VBC's and develop interventions and standardized processes to address gaps. Our Quality and Data Committee, led by physicians, is the main governing and decision-making body for our quality initiatives, working in conjunction with our Membership Committee to monitor performance and, where needed, developing remediation plans for lower performing groups.

We hold to a guiding principle of transparency, openly sharing practice performance data across all PCN practices to foster awareness, share best practices, and encourage healthy competition.

Improvement at the practice and provider level is initiated and supported by the PCN Quality Coaches and our centralized data and analytics team. We support and hold practices accountable through monthly meetings with each practice. We hold to a

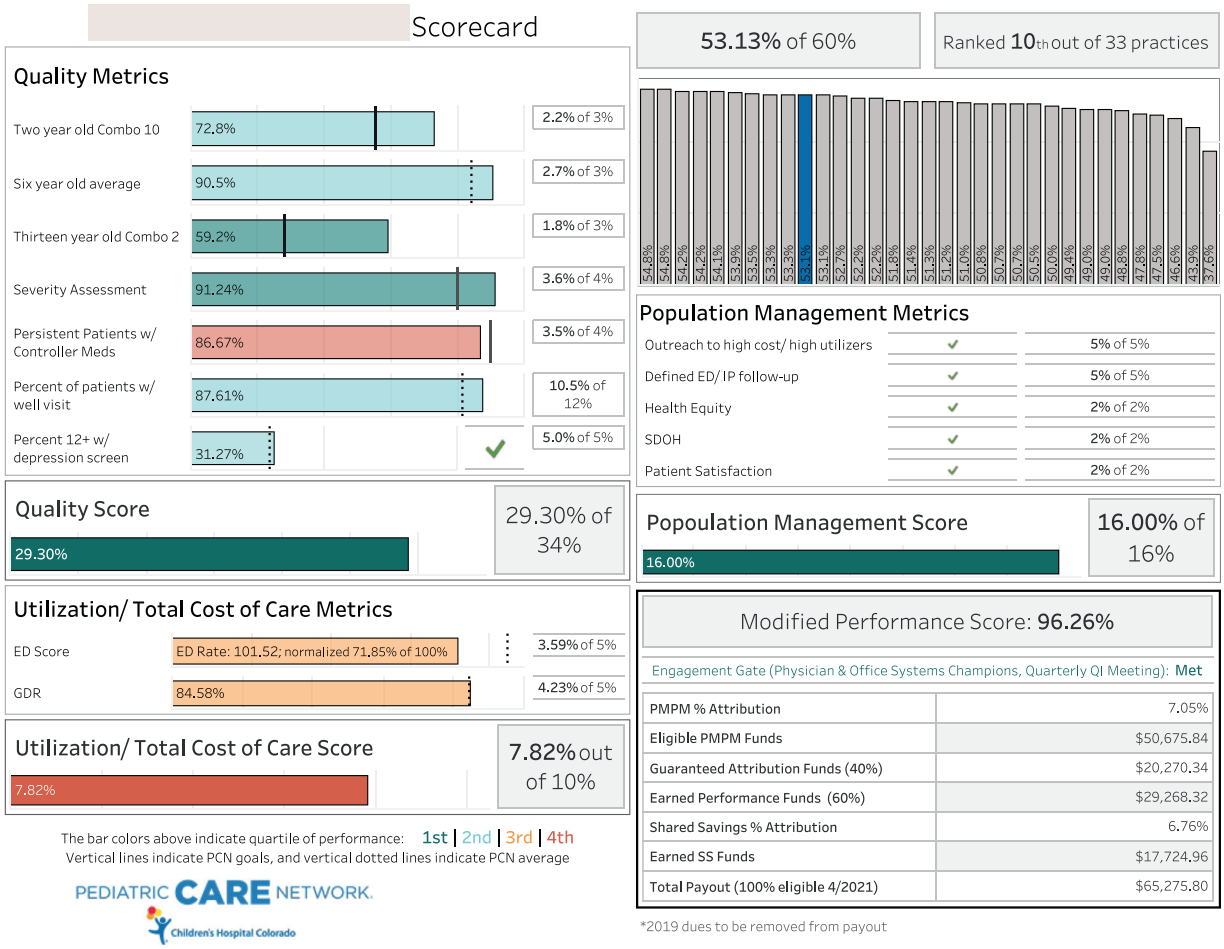

Fig 1. PCN Scorecard.

guiding principle of transparency, openly sharing practice performance data across all PCN practices to foster awareness, share best practices, and encourage healthy competition. Lastly, we incentivize quality improvement and sustained excellence through a funds flow mechanism that rewards practices based on their performance across our core initiatives (see Fig. 1 for a blinded example of the scorecard we utilize in practices).

In past 18 months, we saw an opportunity for practices to improve access and coordination, identify and remove barriers associated with health equity and social determinants of health. Even through the pandemic, the PCN's practices directed their efforts to expanding our quality reach, performing well across our core initiatives while also implementing care coordination and population health management processes into their workflows.

Results Achieved: Since 2017, across the PCN we've seen improved immunization rates, better and more consistent care of our asthmatic patients and decreased rates of unneeded emergency room (ER) visits, as well as improved follow-up of the visits that do occur:

Immunizations: Data provided by the Colorado Public Health Department shows that, compared to the state-wide average immunization rates, the PCN's immunization rates are an average of 12.9% higher for the 2 year-old children and 9.1% higher for the 13 year-old adolescents. Additionally, prior to and throughout the COVID-19 pandemic, the PCN has maintained rates above 2019 National HEDIS goals for nearly every childhood and adolescent vaccine, working in conjunction with well visits to keep children healthy and prevent further disease outbreak. In the last 12 months, the PCN achieved rates of 68.7%

for 2 year-old children and 49.8% for 13 year-old adolescents. Compare that to the 2019 HEDIS goals of 57.9% and 30.3% respectively.

Asthma: The PCN Asthma Program provides practices with access to a homegrown, centralized registry to track data and manage patients. During the COVID-19 pandemic, providers in the PCN have successfully kept the "Controller Metrics" measure above 90%, meaning those patients with persistent asthma have largely continued to be well-managed and have access to controller medication.

Well Care: With the foundation of a strong well care visit program, PCN well visit volumes were considerably higher or equal during Summer 2020 than 2019, even though sick visit volumes were less than 40% of normal. Additionally, well visit volumes for year-to-date 2021 have surpassed those of both 2019 and 2020.

Though our focus is always on upholding the standard of care across our core quality initiatives, we have has also performed consistently well in our VBC's. One health plan rated the PCN the top-quality performing network in the region for the last 11 years, while also achieving a 4.2% lower medical cost trend than the market in our most recent measurement period. For another, the PCN achieved the lowest potentially avoidable ER utilization, while also being ranked as the best quality performing network, adult or pediatric, in Colorado.

Chapter 3: Market Positioning

Problem Statement: In Colorado and many other markets, health system CINs preceded pediatric-only CINs by several years and many pediatricians became members in health system networks long before pediatric CINs emerged. Health plans contracted for and attributed adult and pediatric commercial lives to health system CINs and paid out shared savings to pediatric providers, even though performance focused heavily on adult quality and outcome measures. Health systems strategically positioned their CINs to capture the entire population and take accountability for adult and pediatric lives through their value-based networks. Pediatricians became accustomed to and expected Per Member Per Month (PMPM) and shared savings payments from health system CINs and they had little interest in moving their attributable lives to a different and unproven pediatric network. Emerging pediatric CINs attempted to convince adult health systems and health plans to attribute pediatric lives to pediatric CINs but health plans and systems had little or no desire to change.

PCN Approach: Rather than trying to convince health systems or health plans that pediatric lives need to be attributed to pediatric networks, the PCN took a very different approach. The PCN partnered directly with pediatric primary care providers to make the case that the health and care for children should be managed in the PCN because the network is governed by pediatric providers, evaluated based on pediatric metrics, and rewarded based on pediatric performance. Once PCN members were engaged and committed to coordinating care across our network of pediatricians, pediatric specialists and a leading children's hospital, the PCN considered a difficult strategic choice. The PCN could allow its members to continue to attribute pediatric lives to other health system CINs. While certainly an easier choice, the PCN knew it would then perpetuate the notion that health systems could capture pediatric lives in their networks and our PCN would always be a downstream player in value-based care. We also knew this model was sub-optimal for children because most health system networks were not sufficiently focused on pediatric outcomes.

Once PCN members were engaged and committed to coordinating care across our network of pediatricians, pediatric specialists and a leading children's hospital, the PCN considered a difficult strategic choice.

Alternatively, we could take a chance. We could require that all pediatric lives from our members be re-attributed to the PCN. We knew this was a risk and believed it could result in some members leaving our network permanently because more than half of their patients were attributed to large adult ACOs in our market. At the same time, we knew pediatricians preferred to have children managed in our network because it is governed by pediatricians, focused on pediatric protocols, measured by pediatric 'value', and rewarded by pediatric performance.

Results Achieved: We decided to take the chance. The PCN mounted a thoughtful communication campaign and orchestrated a well-coordinated plan to re-attribute all pediatric lives from all practices to our network on the same day. Pediatric practices simultaneously exited their health system contracts and re-

attributed 40,000 pediatric lives from two large commercial payers to the PCN. With strong communication and a well-designed plan, we maintained all of our practices and providers in the PCN.

Due to this calculated risk and choreographed plan, the PCN is better positioned strategically today than ever before. The PCN has become the only real vehicle for pediatric value-based contracts in Colorado. Additionally, the PCN has advocated for and enabled all of its pediatric primary care practices to remain in network with several new narrow network products developed by health plans. Today, the PCN has over 110,000 attributed commercial lives with few pediatric lives being attributed through other Colorado value-based contracts outside our network.

Chapter 4: Where We Go from Here?

In its first few years, the PCN has overcome initial challenges and achieved several of its early stage goals. However, there is much more to do. Proving and sustaining value in pediatric value-based care is difficult with data limitations and traditional contractual mechanisms which inherently disadvantage pediatric CINs. Financial sustainability is a central challenge as we move forward, as it is difficult to monetize pediatric quality. Many of the interventions we use to address gaps in care can actually increase utilization and cost in the short-term but are critically important for the long-term health of our populations. Healthier kids become healthier adults. It would be more appropriate to reward pediatric networks for the net present value (NPV) of our quality efforts today.[1,2] But until that happens, we must continue to transform the care model in parallel with reimbursement model changes. In its next stage of evolution, the PCN plans to do that by focusing on advancing four strategic objectives.

Proving and sustaining value in pediatric value-based care is difficult with data limitations and traditional contractual mechanisms which inherently disadvantage pediatric CINs. Financial sustainability is a central challenge as we move forward, as it is difficult to monetize pediatric quality.

Objective #1: The PCN will create a single, integrated system of pediatric care. This system of care will stimulate innovative models of care coordination, address social determinants of health and promote health equity to improve care for children. The PCN is also focused on coordinating care across PCPs and specialists to more effectively co-manage several specific pediatric populations across the continuum of care. Given the mental health state of emergency in Colorado, we will be focusing our value-based models on more integrated management of pediatric mental health across our PCPs and specialists.

Objective #2: The PCN will more fully integrate data across its network. It will achieve meaningful EMR data integration with migration towards a single community-wide electronic patient record and an integrated claims platform. Building on this platform, the PCN is advancing more sophisticated analytics and reporting.

Objective #3: The PCN will also expand value-based contracts. While the PCN has over 110,000 pediatric lives in value-based contracts with commercial health plans, our next stage will include value-based contracts with Medicaid. We also anticipate and are preparing for meaningful downside risk and even greater upside reward in future iterations of our value contracts. We will also continue to negotiate by leveraging quality, proactively reducing variability and inefficiencies across the PCN and articulating those gains in context of the value equation.

Objective #4: The PCN will expand its network focusing on Colorado Springs and several other high-density pediatric populations in Colorado. It will also be advancing a new associate membership category to welcome family medicine and pediatric providers that are part of large multi-specialty practices.

When we look back in five years on the PCN and other pediatric clinically integrated networks, how will we measure success? When pediatricians and specialists are co-managing many behavioral and chronic medical conditions such that the health and lives of children are measurably improved, we will have succeeded. When the hospital and providers are comprehensively addressing the social determinants of health including housing, education, food security, utilities and health disparities, we will have thrived.[6] When we can collectively and consistently demonstrate the flattening of the cost curve for children managed in our networks, we will prosper. Until then, we can celebrate our early

successes, knowing with humility that we are only at the beginning of our journey.

Data Sources:

Colorado Department of Public Health & Environment. *Private Report*. 2021.

Colorado Immunization Information System (CIIS). *Private Report*. 2021

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References

1. Brundage SC. You get what you pay for: measuring quality in value-based payment for children's health care. *United Hospital Fund* 2016:Published June 16.
2. Wong CA, Perrin JM, McClellan M. Making the case for value-based payment reform in children's health care. *JAMA Pediatr* 2018;172(6):513–4. https://doi.org/10.1001/jamapediatrics.2018.0129.
3. Steele RW, Deshpande JK, Green A. The value equation in pediatric health care. *Curr Treat Options Peds* 2016;2:318–24. https://doi.org/10.1007/s40746-016-0073-5.
4. Perrin JM, Zimmerman E, Hertz A, Johnson T, Merrill T, Smith D. Pediatric accountable care organizations: insight from early adopters. *Pediatrics* February 2017;139(2):e20161840. https://doi.org/10.1542/peds.2016-1840.
5. Teisberg Elizabeth PhD, Wallace Scott JD. MBA; O'Hara, Sarah MPH defining and implementing value-based health care: a strategic framework. *Academic Medicine* 2020;Volume 95(Issue 5):682–5. https://doi.org/10.1097/ACM.0000000000003122.
6. Melzer S. Matching Market Opportunities With Strategies to Provide Pediatric Value-Based Care. Children's Hospital Association; 2019Published January 9.