Robert Wood Johnson Foundation Payment Reform Evaluation Project

Redesigning Medicaid Payment Policies:
A New Pathway for Achieving High-Value Care for Medically Complex Children

UPMC *for You*, Inc.

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Introduction and Context

Redesigning Medicaid Payment Policies: A New Pathway for Achieving High-Value Care for Medically Complex Children, is being conducted by UPMC *for You*, a Medicaid managed care plan in Pennsylvania.[1] While most children in the U.S. are healthy, children in low-income families are more likely to have complex medical conditions and higher expenditures for health care.[2] These patterns arise partly because these children are much more likely to have needs for health care and community services that are not covered by health insurance benefits.[3] Some sources of this problem are Medicaid policies that limit payment for medical procedures, and insufficient funding and restricted access to Medicaid waiver programs for home and community-based services.[4] Another source is health care and service systems offering fragmented, uncoordinated, and inefficient care that focus on siloed conditions rather than adopting a patient and family-centered approach addressing the diverse needs of the whole child.[5] Targeted programs that improve quality and efficiency – that is, the value of care -- among children with complex conditions and the greatest costs have potential to save future dollars.[6]

To address these problems, UPMC *for You* has redesigned Medicaid care delivery and payment to achieve high value care for children with complex medical conditions in new ways that engage families

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[1] For characteristics of Pennsylvania's Medicaid Program, see: Kaiser Family Foundation. Medicaid: A Primer. March 2013 (Available at: http://kff.org/medicaid/issue-brief/medicaid-a-primer/). Pennsylvania was the first state to develop a SCHIP, which enrolls children up to 300% of the federal poverty level. In Pennsylvania, Medicaid and the State Children's Health Insurance Program (SCHIP) are administered separately – children who develop complex medical needs while in SCHIP are referred to Medicaid; children who are applying for assistance and who have complex conditions are referred automatically to Medicaid.

[2] Sources: Stein R, Silver E. Operationalizing a conceptually based noncategorical definition: a first look at US children with chronic conditions. Archives of Pediatrics and Adolescent Medicine 1999;153(1):68-74; Newacheck PW, Kim SE. A national profile of health care utilization and expenditures for children with special health care needs. Archives of Pediatrics and Adolescent Medicine 2005;159:10-17; Ireys HT, Anderson GF, Shaffer TJ, Neff JM. Expenditures for care of children with chronic illnesses enrolled in the Washington State Medicaid program, fiscal year 1993. Pediatrics 1997;100(2 Pt 1):197-204; and Zhong W, Finnie DM, Shah ND, Wagie AE, St. Sauver JL, Jacobson DJ, Naessens JM. Effect of multiple chronic diseases on health care expenditures in children. Journal of Primary Care and Community Health 2015;6(1):2-9.

[3] Source: Newacheck PW, Kim SE. A national profile of health care utilization and expenditures for children with special health care needs. Archives Pediatrics and Adolescent Medicine 2005;159(1):10-17.

[4] Sources: Ireys et al (1997); and Kitchener M, Ng T, Harrington C. Medicaid 1915(c) home and community-based services waivers: a national survey of eligibility criteria, caps, and waiting lists. Home Health Care Services Quarterly 2004;23(2):55-69.

[5] Sources: van Dyck PC, Kogan MD, McPherson MG, Weissman GR, Newacheck PW. Prevalence and characteristics of children with special health care needs. Archives of Pediatrics and Adolescent Medicine 2004;158(9):884-890; and Strickland B, McPherson M, Weissman G, van Dyck P, Huang ZJ, Newacheck P. Access to the medical home: results of the national survey of children with special health care needs. Pediatrics 2004;113(5):1485-1492.

[6] Source: Liptak GS, Shone LP, Auinger P, Dick AW, Ryan SA, Szilagyi PG. Short-term persistence of high health care costs in a nationally representative sample of children. Pediatrics 2006;118(4):e1001.

and providers in a child's care. UPMC *for You*, the largest capitated Medicaid plan for physical health care in southwestern Pennsylvania, is part of the larger UPMC integrated delivery and financing system; the system also includes the Children's Hospital of Pittsburgh of UPMC,[7] as well as Community Care Behavioral Health, a subsidiary of the UPMC Insurance Services Division and the sole source of mental health and substance abuse services through a capitated Medicaid carve out in Allegheny County and some other areas of Pennsylvania. UPMC business leaders and medical providers share a common dedication to the health and quality of life of children with complex medical conditions, which has created support for this payment reform project.

UPMC *for You* has launched the project in four pediatric practices that are part of Children's Hospital of Pittsburgh of UPMC: the large General Academic Pediatric Practice (GAP) and three practices in Children's Hospital-affiliated provider network, Children's Community Pediatrics (CCP), placing the entire payment reform project under the UPMC umbrella. The four pediatric clinics are located in urban and suburban locations in Allegheny County. The clinics' primary payment model is fee for service (FFS) reimbursement with no financial risk, other than generating a sufficient volume of services and revenue to cover their costs. The clinics are exploring the pediatric medical home model of care, and some clinics are pursuing medical home certification.[8]

In the Pittsburgh metropolitan area (Allegheny County), about 175,000 Medicaid recipients are enrolled in one of four managed care plans for physical health: UPMC *for You*, Gateway Health, Coventry Cares, or the UnitedHealthcare Community Plan.[9] UPMC *for You* is the largest of the four Managed Medicaid plans in Southwest Pennsylvania and has more children enrolled than the other Medicaid plans. All children under age 21 who meet the Medicaid program's criteria for disabling conditions are eligible to be enrolled automatically in a Medicaid managed care plan or the Health Insurance Premium Payment Program regardless of household income.[10] To identify eligible children for this project, UPMC *for You* identified 1,572 enrolled children in the top 10 percent of expenditures in 2010 and 2011, recognizing this group might have the greatest potential for cost savings.[11] The four UPMC pediatric clinics had the

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[7] UPMC operates more than 20 academic, community and specialty hospitals and employs more than 4300 physicians. Children's Hospital of Pittsburgh of UPMC is one of twelve hospitals in the U.S. News & World Report Honor Roll of America's Best Children's Hospitals, ranking 9th overall (Source: UPMC website).

[8] Rosenberg CN, Peele P, Keyser D, McAnallen S, Holder D. Results from a patient-centered medical home pilot at UPMC health plan hold lessons for broader adoption of the model. Health Affairs 2012;31(11):2423-2431.

[9] UPMC *for You's* main competitor for commercial enrollments is Highmark Blue Cross Blue Shield and its hospital system, the Allegheny Health Network.

[10] Some children with disabling conditions are instead enrolled in the Health Insurance Premium Payment (HIPP) Program. Pennsylvania's Medicaid agency determines whether managed Medicaid or HIPP is more cost effective and enrolls children accordingly. HIPP uses Medicaid to pay the child's premiums and to wrap fee-for-service Medicaid services around the standard commercial benefit the child has through an employer.

[11] For U.S. children, the top 10% of child health care spenders account for 69% of all pediatric dollars spent on health care (Source: McCormick MC, Weinick RM, Elixhauser A, Stagnitti MN, Thompson J, Simpson L. Annual

largest numbers of these children (n=263; average age: 8.1 years in 2012), with over half of the children (n=146) receiving primary care at the General Academic Pediatric Practice.[12]

The Robert Wood Johnson (RWJ) Foundation has funded the project for three years, from May 15, 2012 to May 14, 2015. The project's future will be shaped by a new political context in Pennsylvania favoring Medicaid expansion and access to health care.[13] Following passage of the Patient Protection and Affordable Care Act, Pennsylvania did not participate in Medicaid expansion in 2014 (except for children, who were eligible for Medicaid coverage in 2014 up to 138 percent of the FPL). Instead, Republican Governor Tom Corbett launched an alternative Medicaid reform, Healthy Pennsylvania, where single low-income adults aged 19 to 64 would purchase Medicaid-like insurance from private health insurers beginning January 1, 2015. However, the newly elected Democrat Governor Tom Wolf began dismantling the plan 40 days after taking office in January 2015 and launched full Medicaid expansion, called HealthChoices, which is expected to cover up to 350,000 new Medicaid participants. These changes do not affect Medicaid coverage for children. The Medicaid Program is administered by the Pennsylvania Department of Human Services, formerly the Department of Public Welfare (DPW). For convenience, we retain the Department's former name in this report.

Project Objectives

The short-term objective of this project is to improve the coordination, efficiency and, therefore, the overall value of care, ultimately to address the diverse needs of children with complex medical conditions and high expenditures. This objective is accomplished by supporting nurse care coordinators and shared decision making in primary care clinics, paying enhanced fees for care coordination to providers, and transparent reporting of services, quality and costs to clinics and providers. Projected cost savings will offset the costs of the care coordinators and be distributed to a portion of the target population through consumer-directed accounts (CDAs), a financial resource that families can spend to address their children's unique needs, which may also better engage families in their child's health care. Remaining cost savings (if any) will be shared with the pediatric clinics.

The long-term objective is to develop a broader global payment system for all children covered by UPMC *for You*. Ultimately, global payment may lead to a pediatric Accountable Care Organization (ACO) or

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report on access to and utilization of health care for children and youth in the United States: 2000. Ambulatory Pediatrics 2001;1:3-15).

[12] While most children with complex conditions and Medicaid coverage in the region receive care from the Children's Hospital of Pittsburgh of UPMC, not all of those children have coverage through UPMC *for You*. Medicaid allows recipients to switch physical health plans on a monthly basis, and the four health plans compete for Medicaid enrollments. Consequently, the number of children in the project will vary slightly from month-to-month for various reasons, such as switching health plans, disenrollment, seeing a physician at a non-participating practice, moving out of the county, and aging out.

[13] Esack S, Olson L. Gov. Tom Wolf switching PA to more traditional Medicaid expansion. Morning Call, February 10, 2015.

specialty medical home, which may result in higher value and more responsive care at a lower cost for all children through coordinated care delivery.

Approach

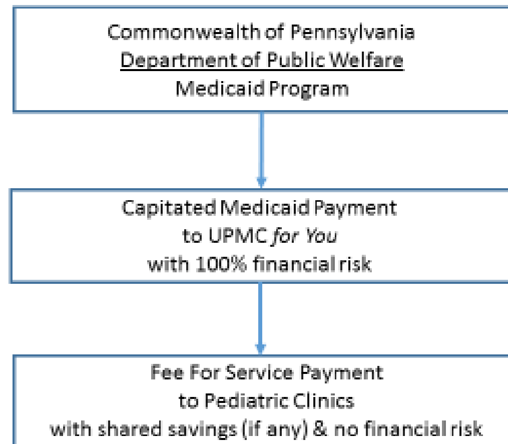
To achieve the short-term objective of the project, UPMC *for You* has constructed a collaborative infrastructure for payment reform that includes payers, providers, children and families, and leaders of community organizations addressing the needs of children with complex medical conditions. Overall direction is provided by the 13-member Leadership Team, with guidance from a 17-member Advisory Board. Project planning and implementation is led by the following work groups; individuals may serve on multiple groups:

- Payment Design Work Group for Provider Component of Model (15 members)
- Payment Design Work Group for Consumer-Directed Accounts (11 members)
- Family Engagement Subgroup (five members)[14]
- Outcomes Subgroup (six members)
- Payment Implementation Task Force (17 members)
- UPMC Support Team (four members)

Project planning was conducted from May 15, 2012 to March 2013. Implementation of the project in the four clinics began in March 2013 and ended in December 2014 (22 months). January – May 14, 2015 was devoted to evaluating the project and, if successful, pursuing its long-term objective.

Payment reform. The figure below shows the project's payment models and financial risks. At the top of the figure, the Department of Public Welfare administers the State's Medicaid Program with federal and state revenues. DPW, in turn, makes capitated Medicaid payments to UPMC *for You*, which has full financial risk for Medicaid physical health services, including pharmacy costs. Behavioral health services are carved out in Pennsylvania and managed through a separate procurement process. UPMC *for You* spends Medicaid, UPMC and RWJ Foundation funds to implement the project in four pediatric clinics that receive FFS reimbursement for Medicaid services with no financial risk and potential shared savings (if any).[15]

[14] The Family Engagement Subgroup has a consumer engagement specialist to advance this work.
[15] One key informant called the payment model FFS reimbursement with shadow capitation.



The basic premise of UPMC *for You's* payment reform is that the project must invest money to save money and improve the health of children with complex conditions. Upfront payment for care coordination and improved engagement of providers and families in treatment decision making will better meet the needs of children with complex medical conditions, improve care, promote health, and generate savings that are larger than the costs of coordination. Some of those expected savings will be shared with medical groups and families. The payment reform consists of the following three components:[16]

- *Prospective payment for nurse care coordinators*: Since March 2013, UPMC *for You* has been paying for nurse care coordinators for children with complex medical conditions and covered by UPMC *for You* in the four pediatric clinics.
- *Enhanced fee for service (FFS) payments*: Since March 2013, physicians and other clinicians have received enhanced FFS payments for care coordination of children with complex medical conditions. The standard Evaluation and Management billing codes for a physician office visit reimburse for a short block of physician time, which may be insufficient to identify and address the needs of children with complex conditions. In addition, other clinical staff who perform care coordination cannot directly bill for those services. In response, enhanced FFS payments directly compensate primary care physicians (mainly pediatricians) and non-billing providers (such as nurses and dieticians) for care coordination

[16] The original plan for payment reform was global payments for a single chronic condition. However, the eligible Medicaid children were scattered across many chronic conditions, and no single condition existed with a sufficiently large number of eligible Medicaid children for the project.

of eligible children. New billing codes are used for the following four types of care coordination performed by the two types of providers: chart review, creation of treatment plan and/or provider consult; transition of care management service (moderate complexity); transition of care management service (high complexity); and medical team conference.[17]

- *Consumer-directed accounts (CDAs)*: In Summer 2014 CDAs were given to eligible parents and other family members who play a vital role in the care of their children with complex conditions. Good evidence indicates that giving parents a cash account under their control to purchase non-clinical goods and services for their children results in significant reductions in their children's unmet needs and improves satisfaction with care and quality of life.[18] The family engagement specialist at UPMC *for You* conducted four focus groups with parents and adolescents to identify their children's unmet needs and formulate spending suggestions and examples for addressing those unmet needs; this information was distributed to parents.[19] If families' CDA spending addresses at least some of their children's unmet needs, CDAs also have the potential to reduce health care costs.

Prior to the start of the project, annual cost savings were estimated to be five percent of total expenditures for children with complex conditions, or about $300,000 per year.[20] Of this amount, up to $250,000 was allocated annually to fund the nurse care coordinators. The remainder would be shared with the families through a one-time allocation of $500 to up to 100 children and their parents/families.[21] Families are eligible to receive CDAs if their children with complex conditions are aged 11-19 as of December 31, 2014, to focus on ages when transitions among care venues are

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[17] The code for chart review, treatment plan and consults is billable in 15 minute increments. The code for conferences is billable in 30 minute increments and, for example, compensates the pediatric generalist and specialist(s) for their time in care coordination. UPMC *for You* was granted a waiver by the Department of Public Welfare to make enhanced FFS payments for care coordination.

[18] For example, evidence from a randomized experiment of Medicaid adults and children is available in: Lepidus Carlson B, Foster L, Dale SB, Brown R. Effects of cash and counseling on personal care and well-being. *Health Services Research* 2007;42(1, Part II):467-487.

[19] The focus groups identified challenges in coordinating care, such as integrating medical care and advice from multiple pediatric subspecialists; obtaining medications, supplies and equipment; working with insurance companies and nursing agencies; and exploring educational and recreational options [Source: UPMC *for You*, How-To Manual for Redesigning Medicaid Payment Policies, Final Edition, November 2014].

[20] The estimated savings are based partly on results from the UPMC Patient-Centered Medical Home Program, a service delivery and payment model that includes care coordination, information sharing and shared savings, and the historic total annual costs of the target population in 2011 and 2012. The enhanced fee-for-service payments were not part of the anticipated savings.

[21] The original plan was to use Medicaid funds for the CDAs, contingent on receiving a waiver of Medicaid payment regulations from the Department of Public Welfare (DPW) in Pennsylvania. However, the DPW made stricter guidelines for compensating Medicaid enrollees prior to CDA implementation, and following review by UPMC *for You's* legal counsel, non-Medicaid funds are being used for the CDAs starting June 2014. UPMC *for You* has obtained approval from the Pennsylvania Department of Public Welfare for the written materials about the CDAs that families receive.

common.[22] The amount was informed by the project advisory board of stakeholders that includes family members of children with complex conditions who are not a part of this project. The value is large enough for a family to make a reasonable purchase of clinical or non-clinical goods and services that might benefit a child's care and health, but not so large that the family would incur additional taxes or risk losing Medicaid eligibility. A portion of any additional savings may be shared with the clinics to create incentives for clinic administrators and providers to reduce costs.

In sum, UPMC *for You* bears the financial risks of this project. For the pediatric clinics, which are financially dependent on a steady stream of FFS revenue, the project represents an initial step away from generating FFS revenue toward other payment models such as global payment or capitation. Clinic activities that save dollars disrupt revenue flows – that is, clinics lose money -- but with the potential for some portion of that lost revenue to be recaptured through shared savings in the future.

Delivery system reform. The project has two types of delivery system reform: care coordination and transparent reporting. Care coordination is advocated frequently to reduce the unmet health care and community needs of children with chronic conditions.[23] However, care coordination for children with complex conditions is a departure from the four pediatric clinics' traditional acute care model of primary care and requires a "philosophical switch" that can impose a significant change in the way pediatricians provide care and generate income. In the acute care model, primary pediatric care is physician-led and designed to treat children with single conditions (billable diagnosis and procedure codes) in short visits, and the four clinics depend on this model for revenue. The acute care model also promotes fragmented care across specialists with multiple, uncoordinated care plans.

In contrast, coordinated care is "planful care" for children with complex conditions: pediatricians, nurse care coordinators and families work together to identify children's diverse needs, define care goals and value-based services to address those needs through shared decision making, and coordinate care across providers and systems to assure those needs are addressed and care goals are met over time. Forced introduction of coordinated care could pose a financial and clinical threat to pediatricians and other providers because of the challenge to the way the pediatric clinics do business in day-to-day practice, although the reform's narrow focus on the relatively small percentage of children with complex conditions might dampen those concerns.

To improve the "readiness" of the pediatric clinics to implement care coordination, the Leadership Team sponsored "learning collaboratives" to build collaboration, engagement and clinical intelligence about payment reform and care collaboration throughout the UPMC system, community agencies, and

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[22] Liptak et al (2006) reports that children with complex conditions and persistently high costs are likely to be in this age range; they recommend greater attention to care coordination in this age group, which CDAs facilitate.
[23] Sources: Strickland et al (2004); and Liptak et al (2006).

families. A goal of the collaboratives was education. Speakers and panels presented information and created a dialogue about the vision and strategies of health care and payment reform, the value and cost of services, the clinical aspects of care coordination and a "whole person" orientation for children with complex conditions, and other topics. Specialty physicians who see children with complex conditions also learned about the new role of care coordinators and the implications for their practices.

UPMC *for You* work groups also have developed several resources to support care coordination and readiness of the clinics, such as:

- One-hour training sessions on care coordination: having little knowledge and experience with care coordination, pediatricians and nurse care coordinators learned new ways practicing together through role playing in clinical scenarios of care for children with complex conditions;
- A clinical resource toolkit containing tip sheets, patient chart review tools, how-to guides for team communication through phone and video conferencing in UPMC, information on automatic prescription refills, behavioral health resources, and other topics;
- New features to the electronic health record, such as templated visit notes for a range of chronic illness care management activities, an integrated care plan template, automating key components of the care coordination processes, and supporting patient and family use of myUPMC (a secure online health management system for obtaining physician advice, reviewing medical histories and test results, renewing prescriptions, requesting appointments, having an online physician visit and other services); and
- Supplying care coordinators with information about children's barriers to care, unmet needs and other issues that is collected by the pediatric clinic through family surveys.

Starting in March 2013, care coordinators were phased into the four pediatric clinics. [24] A new, full-time nurse care coordinator was hired and assigned to the larger General Academic Pediatric Practice. Funding for a second, full-time-equivalent position was distributed across seven registered nurses employed in the three Children's Community Pediatrics practices; they work part-time on care coordination for children with complex conditions.

The care coordinators follow a child/family-centered approach to addressing the needs of the whole child by:

- developing relationships with the children and their parents and families;
- identifying and addressing unmet needs through regular meetings to identify barriers;
- working with their pediatricians to co-create treatment plans with them and follow-up on plan implementation;
- participating in weekly meetings with pediatricians and other clinic staff to review cases;

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[24] Source: UPMC *for You*, How-To Manual for Redesigning Medicaid Payment Policies, Final Edition, November 2014.

- helping parents and patients plan ahead for clinic visits to accomplish goals, and being the first contact for care, rather than the emergency department;
- helping patients and parents navigate the health care and community systems and coordinate care amongst these various providers;
- connecting to behavioral health resources;
- keeping physicians posted on patients' progress; and
- expanding the whole-child approach to include school, friends, play and recreation.

In three practices, the children have received project identification cards containing the names and contact information for a child's care coordinator, physician, and clinic to assist with care coordination in the primary care clinic and when the child presents in other health care settings beyond the primary clinic. Coordination with behavioral health is a critical element because the physical and behavioral health systems are independent in Pennsylvania; the physical health providers in the four pediatric clinics do not have access to their patients' behavioral health information.[25]

The second reform is transparent reporting. UPMC *for You* produces three reports that describe the health care provided to children with complex conditions in the project, and the reports are disseminated periodically to the pediatric clinics and providers. The patient profile report describes the services and their costs for each child. The HEDIS quality report describes gaps in the quality of care for each child, such as missing visits, screenings, and tests. The financial report describes the total cost of care for the project's children, as well as costs for enhanced FFS payments and CDAs, in each clinic.

The reports provide information to providers and other clinic personnel for monitoring and improving the quality and efficiency of care over time. The UPMC information systems are separate for the provider and the payer divisions: while the pediatricians access the UPMC electronic medical records, the pediatricians cannot access the utilization and cost records in the UPMC insurance division. Consequently, pediatricians have little information about the services and costs from all providers that children see, including prescription fills and emergency department visits inside or outside the UPMC system. The UPMC insurance division collaborated with the pediatric clinics to produce new reports that delivered child-level utilization and cost information to clinicians for improving the quality and efficiency of care for children with complex conditions in daily practice. For instance, pediatricians received – for the first time ever -- reports indicating the medical conditions with the highest costs and identified children with those conditions.

[25] One reason the payment reform project is limited to Allegheny County is that Community Care and Behavioral Health has operations in the county, which facilitates care coordination for children with physical and behavioral conditions within independent physical and behavioral health systems.

Tracking measures. UPMC *for You* is collecting utilization, cost and quality measures and generating reports for the day-to-day management of the project and to support the evaluation of the project. Quality is measured mainly by Healthcare Effectiveness Data and Information Set (HEDIS) measures. The UPMC Health Plan information system is the primary source of the measures.

Logic Model

The logic model for the project has two components, child-level and system-level. The child-level component posits that the UPMC delivery system has to "spend money to save money" in caring for children with complex conditions. Financial investment in care coordination – through nurse care coordinators, enhanced FFS provider payments for care coordination, and CDAs to children and their families – will improve the quality of health care and reduce unmet needs and costs for children with complex conditions and Medicaid coverage, ultimately improving the children's health and quality of life.[26]

These benefits occur through four, inter-related mechanisms:

1) Care coordination replaces fragmented, condition-specific care with a whole-child orientation toward care.[27] Children with complex conditions usually see multiple specialists, and in the acute care model, children have a care plan for each specialist, resulting in fragmented and duplicative care across providers. In contrast, care coordination prompts team care by folding more of specialty care into primary care and a single care plan for the whole child.
2) Through on-going patient-coordinator relationships, care coordinators learn about the diverse needs of the children from the families, and families learn about the conditions of their children from the care coordinators and other providers.[28] Two-way learning and shared decision making combine to create care plans that address children's diverse needs.[29]
3) Transparent reporting improves the quality and efficiency of care.

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[26] Example indicators of quality of care include fewer episodes of unplanned care (such as emergency department visits), fewer gaps in completed care, and less duplicated services from multiple providers. Liptak et al (2006) argue that targeted care coordination programs to decrease expenditures for children with the greatest costs have to potential to reduce future expenditures. Antonelli et al (2008) suggest that care coordination in pediatric primary care may produce cost savings (Antonelli RC, Stille CJ, Antonelli DM. Care coordination for children and youth with special health care needs: a descriptive, multisite study of activities, personnel costs, and outcomes. Pediatrics 2008;122(1):e209-e216).

[27] Reducing fragmented care also may reduce emergency department visits and shift more of the child's services into primary care and decrease utilization of specialist physicians, which also may reduce costs, given that specialists usually charge higher fees.

[28] Put another way, by spending more money on nurse care coordinators, care coordinators can spend more face-to-face time with the child and family for learning. Through continuity of care over time, coordinators ideally become the families' "best friend in health care" for navigating the health system.

[29] Medicaid regulations may prohibit spending for some services in a child's care plan. In these cases the care coordinators are problem solvers; their role is to identify other solutions for addressing a child's needs.

4) Families' CDA dollars are spent on goods and services that reduce unmet needs but are not covered by Medicaid.

The system-level component posits that if the payment reforms work at the child level, the UPMC system will reap cost savings of sufficient size to offset its child-level financial investments and share savings with the pediatric clinics in the short run. If the pediatric clinics and providers also perceive that the reforms benefit children with complex conditions, the clinics and providers will change practice patterns and adopt a "whole person" orientation for children with complex conditions, deliver better quality care, rather than just more care to build revenue, and gain knowledge and confidence in managing financial risk. Over time, the pediatric clinics will be more likely to adopt global (or capitated) payments for their entire populations with shared savings (upside potential) and downside risk, along with system reforms creating a pediatric Accountable Care Organization or specialty medical home in the future.

Progress and Results

Overall, the UPMC *for You* Medicaid Plan has completed implementation of the payment reform project in the four participating pediatric practices, and UPMC-wide support for the project is high. Key accomplishments in implementing the project include:

- Increasing UMPC *for You's* readiness to launch the project by hosting learning collaboratives, workshops on team care with care coordinators, building new relationships across UPMC divisions and personnel, particularly between the UPMC insurance division and the pediatric clinics, to support implementation, upgrading the UPMC electronic medical record, and other preparations;
- Placing nurse care coordinators in the four pediatric clinics with no turnover in the project period, which sustains continuity of care with the participating children and families;
- Transforming clinical practice in the four clinics from an acute care model to a coordinated care model for children with complex conditions, with greater clinical "mindfulness" about the cost and quality of care from a population perspective; and
- Promoting child and family-centered care through shared learning and decision making with the goal of identifying and addressing children's diverse needs.[30]

The 24-month results from the impact evaluation show $1,300,000 in attributable savings (net of program costs and controlling for changes in a matched comparison group). The savings are net of costs for the care coordinators and CDAs and include the costs of the enhanced fees. These savings resulted mainly from lower costs for hospital-based care including the use of emergency rooms.

[30] One example of identifying and addressing needs was the discovery through shared learning that the families and clinics must plan for youth aging out of Medicaid eligibility and transitioning into adult health insurance, which may have fewer benefits and more cost-sharing than Medicaid.

The results are estimated using a difference-in-difference study design, where the intervention group is the participating children with complex conditions, and the control group is propensity-matched children with medically complex conditions receiving care through other UPMC *for You* network clinics not participating in this project.[31] In addition, HEDIS quality measures were maintained or improved among children participants. UPMC *for You* plans to distribute a percentage of the savings to the four pediatric clinics, and the algorithm for distributing the savings will be determined later this year.

Unexpected findings were obtained for the enhanced fees and the CDAs. The enhanced fees were underutilized by providers in the four clinics. Key informants at UPMC *for You* noted the providers did, in fact, perform the enhanced services but did not bill for them, probably because the providers follow the same billing protocols for all health plans, and because providers were focused highly on mastering the clinical aspects of care coordination rather than billing protocols.

The CDAs did not work as expected along several dimensions. Pennsylvania's Medicaid Program had complex requirements for providing financial incentives to Medicaid recipients that required substantial time and effort to navigate, which were unfeasible to complete in this project. Instead, separate, non-Medicaid funds were used for the CDAs. In the future UPMC *for You* intends to devise a means to practically implement family/patient incentives that are compliant with Medicaid requirements. Second, giving the CDAs to participating families was unexpectedly difficult to implement. Care coordinators expended a surprisingly high amount of effort reaching out to participating families and convincing them to accept the CDAs.[32] Ultimately, CDAs were distributed to most of the eligible families. Third, some families did not spend their CDA money. While complete spending records were not collected from families with CDA spending, partial information indicates that low-income families generally used the CDAs to buy practical and unaffordable goods to address a child's health and social needs, such as a college student buying a small refrigerator for a dorm room to store insulin, a new bathtub to address a child's needs for better access, or athletic equipment. Some families spent CDA funds for clothing alterations to allow a child with an unusually small stature to have age-appropriate clothes to wear to school, which was a quality of life improvement for the child. Other families used the CDAs to buy groceries.[33]

Finally, key informants report that pediatricians and participating children and families were highly satisfied with the project. Families were grateful for the extra attention from care coordinators, which

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[31] Source: UPMC for You. Final Narrative Report to the Robert Wood Johnson Foundation, June 19, 2015.
[32] While UPMC *for You* has not yet collected information from participating families about their reluctance to accept the CDAs, key informants reported anecdotal results that families might be suspicious about the underlying motives of an insurer giving them a relatively large amount of free money, which is a rare event in low-income families. Another reason is that families were required to visit the clinic, receive instructions and guidelines for spending CDA funds, and complete paperwork, which may have slowed CDA disbursement.
[33] Purchasing groceries may ultimately be a health-related purchase for the child. In a low-income family, using CDA dollars for groceries or to pay an overdue bill may free up other income for the child's health-related expenses.

created a sense of personalized medicine and that someone really cared about the child's health and family. The clinician leaders and pediatricians in the four clinics were overwhelmingly positive and engaged in coordinated team care, the "right kind of medicine" for children with complex conditions.

Facilitators and Barriers

Facilitators and barriers are presented in no particular order.

Facilitators.

- Leadership and support for the project from the leaders of UPMC *for You* and also from the top leaders throughout the larger UPMC integrated delivery system.
- Vision of a better way to care for children with complex conditions and passion throughout UPMC to improve their health and quality of life.
- Enthusiasm for and dedication to the project from all participants – clinics, providers, committee members, UPMC *for You* and Community Care Behavioral Health.
- State government support for service innovations that control costs, mainly from the Medicaid Program and the Department of Public Welfare, as well as from the Allegheny County Department of Human Services.
- Implementing and financing the payment and service delivery reforms in one integrated delivery system that oversees both the financing and delivery of Medicaid services for children, which also benefits the system by tightening the connections between UPMC's employed physicians and insurance plan.
- Learning collaboratives, workshops and other activities to teach the reasons for the payment and system reforms and how to perform care coordination for children with complex conditions
- Pairing care coordination with shared decision making to engage families and address their perspectives in the health care of their children with complex conditions.
- UPMC *for You* offering behavioral health resources to nurse care coordinators, in addition to existing on-site behavioral health services Local collaborative culture of diverse interests working together on projects to address local issues.
- Robert Wood Johnson Foundation sponsorship, which generated interest, legitimacy, and support for the project within the larger UPMC system.

Barriers.

- Internal and external bureaucratic, administrative, regulatory, and legal requirements linked with Medicaid that generally inhibit innovation and increase the workload and time for accomplishing project activities, such as:
    - Navigating government and internal legal authorization to fund the consumer-directed accounts; and
    - Obtaining required prior approval from the Department of Public Welfare for mailed communications to patients, which slowed progress

- Challenges of implementing single-payer reforms for a relatively small number of children in a multi-payer system with large numbers of children.
- Little clinical experience in care coordination, which created cultural, logistical and training challenges in moving from traditional medicine led by physicians toward team medicine that includes care coordinators in a patient-centered medical home.
- Limited experience of clinics and providers in bearing financial risk and viewing a service as an expense (in global payment) rather than revenue (in FFS), particularly in this market dominated by FFS; physicians have little knowledge of what services cost.
- Potential threat of loss of revenue to specialist physicians due to reduced fragmentation from care coordination, although the number of patients in the project is small.
- Challenges in accessing the children's behavioral health data, which is protected by strict confidentiality restrictions.
- Challenges in changing the UPMC billing systems to accommodate new coding to process claims for the enhanced care coordination fees.
- Challenges in changing the electronic health record to support the care coordinators.
- Families' lack of resources for transportation, internet access, and household expenses, which may interfere with their children's care; families may have unmet needs for in- home services.
- Some patients and families less engaged in care coordination for various reasons, including preference for physician-led care ("doctor knows best" view of health care) and low health care literacy.
- Children and families may switch Medicaid plans, increasing the risk of discontinuity in health care and unmet needs.

Evaluation and Sustainability

Evaluation.

UPMC *for You* is conducting the impact evaluation of the project as described in the application to the Robert Wood Johnson Foundation. Although a process evaluation of the project is not described in the application, UPMC *for You* is examining various aspects of the project's implementation. For example, a descriptive analysis is underway of the items that families purchased with their CDAs, as well as family views about the CDAs and the care coordinator services, their overall impressions of the project, and whether and how their children benefited from participating in the project.[34] Information also is being collected from clinic administrators, physicians and care coordinators about their views of the project. An exploratory analysis may be conducted about whether spillover effects occurred in the four clinics --

[34] Participating families were asked to complete a form documenting their CDA purchases, but the percentage of families completing the form is low, offering only a partial inventory of the purchases. The main source of information about the views of participating families is focus groups conducted in the first year of the project.

whether the changes in clinical practice for children with complex conditions and Medicaid coverage carried over to other children in the clinics.

Sustainability.
Based on the favorable results, UPMC *for You,* in partnership with Children's Hospital of Pittsburgh of UPMC and Children's Community Pediatrics, is expanding the care coordination and shared savings model to all 50 locations of the Children's Community Pediatrics' network with about 55,000 children covered by UPMC commercial (30,000) and Medicaid (25,000) plans.[35] The expansion coincides with the Department of Public Welfare allocating Medicaid funds for community care coordination throughout Pennsylvania, which may cover some costs of care coordinators in the expansion. The clinics will choose the children who are eligible for care coordination, rather than using the high-cost eligibility criteria in this project, and it is unclear whether the new eligibility criteria will affect future shared savings. UPMC will provide technical assistance and support to the expansion clinics, including future learning collaboratives on various topics. In alignment with the expansion, Children's Hospital of Pittsburgh of UPMC is redesigning its care delivery to rely less on specialists and focus more on primary care.

This project and its expansion to all pediatric clinics are UPMC *for You's* first steps toward the long-term goal of financing pediatric care for all children with Medicaid coverage through global payments (or capitation) where the UPMC children's hospital, clinics and providers are at financial risk in a medical home model, possibly within a pediatric accountable care organization. Such an expansion would include all Medicaid/CHIP children and possibly children with commercial and other plan types as well.

Lessons Learned
UPMC *for You's* payment reform project, Redesigning Medicaid Payment Policies, is completed successfully, and attention has now shifted to expanding the project to all locations in Children's Community Pediatrics' network. Project implementation offers several preliminary insights about payment and health system reform.

A critical lesson learned is that readiness is prerequisite to successful implementation of payment and health system reforms. When payment reform is linked with a fundamental change in how medical care is practiced, substantial amounts of leadership, time, and resources must be invested to increase the readiness of the health care organization for clinical transformation. In UPMC *for You's* three year project, the first year was devoted to preparing and planning the implementation of care coordination in the four pediatric clinics. Even with this investment, operationalizing intensive care coordination was new to the physicians and care coordinators, who faced a steep learning curve to master this new clinical model for children with complex conditions in the context of a patient-centered medical home, which also was relatively new for the clinics. The clinics' willingness and readiness to make the shift,

[35] Source: UPMC for You. Final Narrative Report to the Robert Wood Johnson Foundation, June 19, 2015.

along with physician leadership, contributed to clinic success in implementing the project. The in-kind contribution of nurse coordinators to the clinics also facilitated clinic adoption of the project. This lesson raises a policy issue: what investments will be required when value-based payment and care coordination are expanded to all clinics in the Children's Community Pediatrics network?

A related insight is that UMPC *for You* achieved its implementation goals because the four clinics, the UPMC insurance division, the UPMC children's hospital and other sectors developed new communication channels and collaborated extensively to design and manage the program, identify changes, fix problems, and share perspectives. This organizational behavior is noteworthy because the UPMC insurance division and the four clinics rarely had occasion or cause to work together to achieve common goals before receiving the Foundation's grant. This pattern suggests building a 'collaboration network' and learning a common language may be an essential component of building system readiness as well as a byproduct of implementing the payment and system reforms. Building a collaboration network may be easier when payers and providers are in the same organization than when the two are separate organizations potentially having disparate payment reform agendas.

Another lesson is that physicians have little knowledge about the costs of care, and improving physicians' knowledge and information about costs may increase the likelihood of more efficient care delivery and cost savings, and possibly the likelihood of physicians accepting financial risk in the future. Put another way, physicians must have information about costs if they are to consider costs when addressing the diverse needs of children with complex medical conditions. UPMC *for You's* transparent reporting of services, costs and quality may have contributed to producing shared savings.

An important insight is that care coordination is necessary but insufficient to address the diverse needs of children with complex conditions. Engaging families and shared decision making also are essential to developing care plans that are responsive to children's needs and that address the "whole child," which, in turn, may improve families' satisfaction with care and possibly children's health outcomes.

A related and surprising lesson is that UPMC *for You's* initial assumptions about CDAs were not affirmed when implemented in the clinics. Pennsylvania's Medicaid Program had complex requirements for using Medicaid funds for the CDAs, and navigating the requirements was unfeasible in this project. Distributing the CDAs to eligible families was challenging administratively rather than easy to accomplish. Families spent CDA dollars on a wide variety of goods and services that might benefit the children's physical or mental health or quality of life in some way. Despite these experiences, CDAs might have benefited shared decision making. Families met with care coordinators to pick up their CDAs, which opened conversations about the needs of their children that may have improved the quality of coordinated care in addressing those needs.

In closing, payment and health system reform is an on-going and perhaps never-ending process, and final lessons to be learned will emerge when UPMC *for You* completes its evaluation of the payment reform project, and from discovering whether care coordination is scalable in the pediatric clinic network in the future.