Population Health, Value-based Payment, New Models of Care—Making it work for Pediatrics

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HEALTH NETWORK BY CINCINNATI CHILDREN’S
Faculty Disclosure Information:

In the past 12 months, I have no relevant financial relationships with the manufacturer(s) of any commercial product(s) or provider(s) of commercial services discussed in this CME activity.

I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.
Learning Objectives

• Recognize how the pediatric triple-aim differs from adult models.
• Understand different models of value-based payment and the effect on both pediatric population health and pediatric practice health.
• Assess how primary care practices can best prepare for these changes.
Top 10 Current Trends in Health Care

1. Patient insurance coverage
2. Automation – EMR, reminders, patient portals, etc
3. Consolidation
4. Shift from fee-for-service to value
5. Evaluation of quality metrics
6. Transparency – price, patient satisfaction, outcomes/quality
7. Competition – non traditional
8. Emphasis on *Determinants of Health* (social, environmental, behavioral)
9. Integration of behavioral and social determinants into the medical home
10. Emphasis on community “health” and integration
Physician response: anxiety
Physician response: denial
Better Care

Better Health

Lower Cost
Pediatric Triple Aim

Healthy Child
Healthy Adult

Optimize Health and Development

Reduce High Cost Care
## Value-Based Models

<table>
<thead>
<tr>
<th>Degree of Population Risk</th>
<th>Fee for Service</th>
<th>Pay for Performance</th>
<th>Pay for Coordination</th>
<th>Bundled and Episode Payments</th>
<th>Shared Savings</th>
<th>Capitation</th>
<th>Health System Sponsored Health Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Paid for each unit of service without constraint on spending</td>
<td>Payments tied to objective measures of performance</td>
<td>Additional per capita payment based on ability to manage care</td>
<td>Payment based on delivery of select services within a given timeframe</td>
<td>Shared savings from decreased utilization</td>
<td>Full risk of patient population</td>
<td>Insurer AND Full risk of patient population</td>
</tr>
</tbody>
</table>
Where’s the Trend?

Direction payers are heading

THE RISK CONTINUUM ASSOCIATED WITH EXISTING AND PROPOSED REIMBURSEMENT STRUCTURES

- Fee-for-Service
- Bundled Payment
- Payment for Episodes of Care
- Gain Sharing
- Global Payment with Performance Risk & P4P\textsuperscript{†}
- Global Payment with Financial Risk

- Consumers
- Employers
- Health Plans
- Government Payers
- Physicians
- Medical Groups
- Hospitals
- Other Providers

\* Medical homes that receive extra dollars for patient management.
\dagger P4P = pay for performance.
Fee for Service

Advantages

• Familiar
• No accountability for outcome = no risk

Disadvantages

• Fee for service
  – Some codes paid
  – Some codes not paid
  – RVU inequity
  – No allowance for care coordination, phone calls
  – “Piecemeal” payment
  – Work intensive for staff
  – Harder vs. Smarter
  – Payment changes without warning

8/22/2014
Pay 4 Performance

• Started in the early 2000’s
• Financial incentives and penalties
  – Example: 80% of 2 year olds fully immunized
• Problems:
  – Required data to measure benchmarks
  – Attribution often incorrect
  – Incentives not enough to change behavior
  – Built on fee-for-service
  – Disincentive to serve vulnerable populations
Patient-Centered Medical Home

Reality

- PCMH built on an adult model of chronic disease management
- Recently has been adapted for pediatrics
- Payment for care coordination is variable
- Places emphasis on risk entirely on primary care
Shared Savings (one-sided risk)

**Agreement**
A relationship is struck between providers and payers including patient attribution, covered services, and estimated medical costs.

**Billing & Claims**
Provider submit claims as they would under a fee-for-service structure—nothing new.

**Analysis:** The payer and provider each review medical costs to see what, if any, savings were achieved.

**Payout**
Payer pays provider organization bonus based on savings achieved.

**Bonus Distribution**
Provider organization divides bonuses among program provider participants (e.g. hospital, specialists, primary care, etc.)
• Provider has to invest in care coordination solutions with no added income
• Program has less incentive for low cost practices/hospitals
• The “shared savings” amount decreases with time and success
• Payer and provider select a particular high risk patient population
  – Prenatal care
  – Medically complex children
• Payer and provider decide on financial goals for shared savings and shared risk
• Rewards and penalties are calculated and shared
• Global Capitation
  – Provider organization, or group of organizations, come together to receive a single fixed payment for the entirety of healthcare services a patient.
  – This includes primary care, hospitalizations, specialist care and ancillary services.

• Partial Capitation
  – Single monthly fee that is paid to the provider only covers a defined set of healthcare services.
  – Services not covered are usually still paid for on a fee-for-service basis. For example, it is not uncommon to see a
  – Partial capitation model that only includes physician services (primary care and specialty) and laboratory services, but excludes hospital-based care, pharmacy, and mental health benefits.
Financial Reality

- Pediatrics = Healthy Grown Child to the Adult Health System
- Medicaid/CHIP insure 46% of US Children
- Cincinnati Children’s
  - Medicaid = 44% charges
  - Medicaid = 28% payment
Population Health—Risk Arrangements

- Monthly capitated payment for the population at risk
- “Up front” payment to build infrastructure
  - If not, enough to “pay back” hospital for infrastructure
- High enough capitation rate to budget for ongoing care management, innovation, data, risk stratification
- Clinician alignment for incentives
  - Both hospital and primary care
# Provider sponsored health plan

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PROS</th>
<th>CONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build</td>
<td>• Control</td>
<td>• $10-20 million in start-up costs, PLUS risk-based capital</td>
</tr>
<tr>
<td></td>
<td>• Specificity of design</td>
<td>• Execution risk due to lack of experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Pediatric population may not be enough covered lives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• State competition may preclude your involvement</td>
</tr>
<tr>
<td>Buy</td>
<td>• Immediate capability</td>
<td>• Scarce supply of assets to buy</td>
</tr>
<tr>
<td></td>
<td>• Experienced operators</td>
<td>• Very expensive costs between $500–$1000 per covered life</td>
</tr>
<tr>
<td>Partner</td>
<td>• Immediate capability</td>
<td>• Scarce supply of partners</td>
</tr>
<tr>
<td></td>
<td>• Experienced operators</td>
<td>• Possible misalignment of incentives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lack of control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Difficult to find pediatric-specific partners</td>
</tr>
<tr>
<td>Outsource</td>
<td>• Immediate capability</td>
<td>• Few experienced vendors (third party administrator)</td>
</tr>
<tr>
<td></td>
<td>• Experienced operators</td>
<td>• Requires relationship management</td>
</tr>
<tr>
<td></td>
<td>• Can custom design relationship</td>
<td></td>
</tr>
</tbody>
</table>
- Different risk arrangements
- Some starting with clinical integration
- Variations on shared savings and bundled payments
- Some becoming their own health plans
- Access—physician payment
- Care Management
- Evolving set of pediatric population health experiments

<table>
<thead>
<tr>
<th>Risk Strategy (&quot;Pathfinder&quot;)</th>
<th>Clinical Integration</th>
<th>Risk Arrangements</th>
<th>Health Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cincinnati Children's Hospital Medical Center</td>
<td>Phoenix Children's Hospital</td>
<td>NorthShore University HealthSystem</td>
<td>Driscoll Health Plan</td>
</tr>
<tr>
<td>Children's Healthcare of Atlanta</td>
<td>Children's Healthcare of Atlanta</td>
<td>Centegra Health System</td>
<td>Texas Children's Hospital</td>
</tr>
<tr>
<td>Seattle Children's</td>
<td>Seattle Children's</td>
<td>+NorthShore University HealthSystem</td>
<td>Sendero Health Plans</td>
</tr>
<tr>
<td>CARE New England</td>
<td>CARE New England</td>
<td>health network BY CINCINNATI CHILDREN'S</td>
<td>Alliant Health Plans</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Scott &amp; White Health Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maine Community Health Options</td>
</tr>
<tr>
<td>Plan</td>
<td>State</td>
<td>2008</td>
<td>2009</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Geisinger Health Plan</td>
<td>PA</td>
<td>5.5%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Health First Health Plans</td>
<td>FL</td>
<td>4.3%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Providence Health Plans</td>
<td>OR</td>
<td>-0.2%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Gundersen Lutheran</td>
<td>WI</td>
<td>1.1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Dean Health Plan</td>
<td>WI</td>
<td>0.8%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Driscoll Children’s Plan</td>
<td>TX</td>
<td>12.4%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Health Plan of CareOregon</td>
<td>OR</td>
<td>15.2%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Texas Children’s Health Plan</td>
<td>TX</td>
<td>2.8%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>
Health Network by Cincinnati Children’s

2011
- Feasibility study, financial model proposal

2013
- Started operations with two Ohio Medicaid MCOs

2015
- Population management
- Care management model maturity
- Practice partnerships
HNCC Population

HNCC Members by ZIP Code:
- 1,051 +
- 901 to 1,050
- 751 to 900
- 601 to 750
- 451 to 600
- 301 to 450
- 151 to 300
- 1 to 150
Distribution of Pediatric Medical Expense

<table>
<thead>
<tr>
<th>Healthy, Preventive</th>
<th>% of population</th>
<th>% of spend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>74.5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chronic</th>
<th>% of population</th>
<th>% of spend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25%</td>
<td>70%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Complex</th>
<th>% of population</th>
<th>% of spend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.5%</td>
<td>25%</td>
</tr>
</tbody>
</table>
Innovative Case Management

Data for Quality and Financial Management

Practice Network Development and Transformation

Health Network by Cincinnati Children’s

ACTIVITIES THAT PROMOTE THE TRIPLE AIM
Distribution of Pediatric Medical Expense

<table>
<thead>
<tr>
<th>% of population</th>
<th>% of spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Complex
Opportunity

• Inpatient-Outpatient coordination
  – Complex Care Center as an “outpatient ICU”
  – Shared rounds by clinicians or care managers

• High Risk Care Management
  – Nursing, social work, community health, behavior

• Family Involvement
  – Can advise to improve patient experience
Chronic Care Management

% of population  % of spend

25%  70%
Health Network by Cincinnati Children’s

ACTIVITIES THAT PROMOTE THE TRIPLE AIM
Value Based Payments Drive Family-Centered Care

- Most Costly Population with most room for improvement in Value (Quality/Cost)
- Demands increased resources
- Value-Based Payments allow innovative financing
- Families have options
- Coordinated Care is Key
  - Seamless transitions
  - Integration with the Health System
- Systemic Improvements benefit all patients/populations
HNCC Care Team Roles

- Facilitate and manage the care coordination and case management across the continuum of care for HNCC patients
- Provide ongoing support and expertise through comprehensive assessment, planning, implementation, and overall evaluation of individual HNCC patient needs
- Responsible for utilization review and discharge planning
- Promote continuity of care and effective resource management

- Participate as part of the healthcare team in the coordination, referral, and support of HNCC members
- Build trusting and therapeutic relationships to provide communication, empathy, and collaboration between patients, families, and care teams
- Act as a link between HNCC members/families and community resources, events, programs, and information

- RN Case Manager
- Social Worker
- Community Health Worker
- Shared Team Members

- Perform psychosocial assessment and intervention
- Maintain a liaison with the community to ensure continuity of care for patient
- Partner with families and care team to manage resources, promote interdisciplinary collaboration and continuity of care

- Diabetic Educator
- Mental Health Specialist
- Internal & External Provider Liaisons
- Community Relations
- Data Analyst
- Quality improvement
% of members HR referrals closed in the last month who were enrolled in HR CM

- Jan-14: 18%
- Feb-14: 16%
- Mar-14: 11%
- Apr-14: 14%
- May-14: 20%
- Jun-14: 23%
- Jul-14: 32%
- Aug-14: 42%
- Sept-14: 43%
- Oct-14: 39%
- Nov-14: 42%
- Dec-14: 38%
- Jan-15: 41%
- Feb-15: 60%
- Mar-15: 53%
- Apr-15: 42%
- May-15: 41%
- Jun-15: 60%
- Jul-15: 60%

Goal: 60%
UCL: Above 60%
LCL: Below 14%
PMPM Allowed
High Risk Members

- Allowed PMPM
- UCL for Allowed PMPM
- LCL for Allowed PMPM
- x bar

[Graph showing monthly PMPM allowed for high risk members from September 2013 to May 2015.]
Estela

- Recently moved in with aunt, physical abuse at home
- Aunt speaks little English
- 17 years old, pregnant, now at 30 weeks
- Had a previous child at 26 weeks who died
- Had preeclampsia with first pregnancy
- Finished up to 7th grade
• Team Estela
  – Estela
  – Adolescent Medicine
  – Nurse Care Manager
  – BH facilitator
  – Social Worker

• OB care

• Home Visiting
  – Early Head Start
  – Positive parenting, will continue for 3 more years
  – Weekly BP checks
  – Depression, responded to Home based CBT (Moving Beyond Depression)

• Started working on GED
• Had a healthy girl at 37 weeks
Alina

- Third admission for status asthmaticus in 4 weeks
- Asthma is set off by fumes in her family’s apartment
- Family desperately wants safe housing
• Team Alina
  – Inpatient Team
  – Nurse Case Manager
  – Social Worker
  – Family
• Medical Legal Partnership
• Temporary Housing
Building a Healthy Population

% of population % of spend

Healthy, Preventive

74.5% 5%
Health Network by Cincinnati Children’s

ACTIVITIES THAT PROMOTE THE TRIPLE AIM
Cincinnati Children’s Primary Care

PRACTICE REDESIGN
What A Well-Trained Clinic Will Detect

- Unemployment; lack of high school degree; ex-offender reentry issues
- Overwhelmed new parents; lack of parenting role models
- Domestic violence; mental health issues; inadequate education services
- Hunger; homelessness; denial or delay of benefits; utility shut offs

Maslow’s Hierarchy of Needs

- Basic Human Needs
- Safety
- Belonging
- Esteem & Respect
- Achieving potential

Potential Collaborations

Henize, Kahn (2013)
Using EPIC to drive social history screening

<table>
<thead>
<tr>
<th>Social/Environmental (Questions to ask family during visit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child lives with</td>
</tr>
<tr>
<td>* Are you having problems receiving WIC food stamp, daycare vouchers, medical card, or SSI?</td>
</tr>
<tr>
<td>* Housing problems (overcrowding, roaches, rodents, utilities, mold, lead)?</td>
</tr>
<tr>
<td>* Threatened with eviction or losing your home?</td>
</tr>
<tr>
<td>* Over the past 2 weeks, have you felt down, depressed or hopeless?</td>
</tr>
<tr>
<td>* Over the past 2 weeks, have you felt little interest or pleasure in doing things?</td>
</tr>
<tr>
<td>* Do you feel that you and/or your children are unsafe in your relationships?</td>
</tr>
<tr>
<td>* Would you like to speak with a social worker or legal advocate in the clinic about these issues?</td>
</tr>
</tbody>
</table>

**Benefits**

**Housing**

**Depression**

**Domestic Violence**

**All others**
Connecting to Community Services

Calls to 211 from PPC waiting room

Keeping Infants Nourished & Developing (KIND) Formula Distribution

- Education for providers
- Screening prompts
- Education for providers

Child HeLP Referrals per 1000 Well Child Visits

- PPC
- Fairfield
- Hopple


# of referrals/1000 Well Child Visits

0 5 10 15 20 25 30 35 40

Number of cans distributed

0 1 2 3 4 5 6 7 8 9 10

Number of 211 calls

03/01/11 04/01/11 05/01/11 06/01/11 07/02/11 08/06/11 09/06/11

07/28/13 08/02/13 08/09/13

Install phone signage

KIND signage
• Preventive care
  – 14 month bundle
• Started with focus on the visit
  – Workflow enhancements
• Moving toward population management
  – Registry
  – Population-level care gaps
  – Decision support
% of the CCHMC Primary Care Population turning 14 months old who have received the entire Bundle of Preventive Services

Preventative Services Ideal Flow
Site Launches:
2013-March-FPC
2013-April-PPC
2013-May-HPC

Newborn Coordinators begin-2013-March
EPIC Best Practice Alert- 2013-May
EPIC Discharge Order-2013-June
EPIC WCC Doc Flow Sheet Optimization-Sept

Preventative Services Bundle:
DTaP, IPV, Hib, Pontiac, Hep B or HBV, PCV13, MMR, Varivax, Risk factor, Flu season beginning 9/1/12, ASQ, Lead

Percentage

Reporting Month

% receiving entire bundle
Median
Goal (95)
Proportion of Patients Seen at the Base ED with an Acuity of 4 or 5

Created by Kate Rich,
James M. Anderson Center for Health Systems Excellence
Percent of PPC Weekday Ill Care Visits that Are Walk-Ins

p-Chart

- 7/8/13 Open Access Begins
- 10/22/13 All Day Open Access Begins
- 5/1/14 Centralization of primary care triage

Created by Kate Rich, James M. Anderson
Center for Health Systems Excellence
ED Visits and Percent Low Acuity (Triage Level 4 & 5) by Month

All Locations

All ED visits are included in this measure, regardless of whether the patient was admitted from the ED or went home.

Last update: 05-15-14 by H. Atherton  
Data source: EPIC
HNCC and Community Pediatricians

- Health Network Practice Engagement
  - Practice Network Agreements
  - Quality Incentives
    - Population identification
    - “Attribution”
    - Partnership on projects
  - Patient-Centered Medical Home
No claims for member?

Select the MCO assigned PCP

Attribute member to this provider

Most recent 12-24 months of historical claims\(^1\) analyzed for specialties of Family Practice, FQHC, Internal Medicine, OB/GYN, Pediatrician and RHC

With which provider has the member had the most visits?\(^2\)

1. Visits defined on the following page.
2. If there is a tie in number of visits the provider with the most recent visit is chosen.
# Year 1 – Payout Timeline

<table>
<thead>
<tr>
<th>Tasks</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jan</td>
<td>Feb</td>
</tr>
<tr>
<td>Generate Membership/Physician/TIN data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format Incentive Reports for distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit Incentive Reports for distribution</td>
<td></td>
<td>Q1 Data</td>
</tr>
<tr>
<td>Submit Audited Incentive Report Documents to AP</td>
<td>Q1 Data</td>
<td></td>
</tr>
<tr>
<td>AP sends checks to the Practices</td>
<td>Q1 Data</td>
<td></td>
</tr>
<tr>
<td>Network Team deliver each Practice’s Report</td>
<td>Q1 Data</td>
<td></td>
</tr>
</tbody>
</table>
Patient Centered Medical Home

- PCMH Improvement Team established by CCHMC.
- PCMH Coaches provide consultant and coaching resources.
- Engaging “Early Adopters” to enhance our own learning.
Successes

• NCQA PCMH Recognition under 2011 Standards
  o Level 3
    ▪ 5 CCHMC primary care practice sites
  o Level 2
    ▪ 1 Community PCP practice (2 practice sites)
• Increasing scope and scale
  – Behavioral Health
  – Foster Care
  – Other MCOs
  – New model for Ohio Medicaid Waiver
• Developing newborn program
• BH Integration in PCMH practices
• Trial of embedding CM in FQHC
• Connecting every member to a Medical Home
Thank you!

- Questions