Targeted Healthcare Transformation: Pediatric-Focused APRN Leadership in Care Coordination Models
Pam Herendeen, DNP, PPCNP-BC
Professor of Clinical Nursing
Coordinator of Education & Staff Development
Accountable Health Partners
University of Rochester

Disclosures

• This speaker has no financial disclosures

Objectives

• Participants will define the critical concepts of population health, accountable care organizations, care coordination and medical homes
• Participants will describe the significance of pediatrics being included in these innovative new models of health care
• Participants will describe the significant role of nursing/NP’s in this evolving health care transformation

The Triple Aim

• Improve patient experiences of care
• Improve the health of populations
• Reduce per capita costs of care for populations

Core principle now at heart of major U.S. payment and delivery system reform efforts.

Population Health

• Key element of the Triple Aim
• “The health outcomes of a group of individuals, including the distribution of such outcomes within the group. These groups are often geographic populations such as nations or communities, but can also be other groups such as employees, ethnic groups, disabled persons, prisoners, or any other defined group.”

(Kroger & Stoddart, 2003)

Population Health

The IHI Triple Aim team operationally defines the term “population health” by the measures used such as life expectancy; mortality rates; health and functional status; disease burden (the incidence and/or prevalence of chronic disease); and behavioral and physiological factors such as smoking, physical activity, diet, blood pressure, BMI, and cholesterol (as measured via a Health Risk Appraisal).
Population Health

Population medicine refers to the design, delivery, coordination, and payment of high-quality health care services to manage the Triple Aim for a population using the best resources we have available to us within the health care system. Much of the efforts today such as the Accountable Care Organization, risk stratification methods, patient registries, Patient Centered Medical Home, and other models of team-based care are all part of a comprehensive approach to population medicine.

Population Management

Effective population management requires new partnerships among providers and payers, integrated data support, redesigned IT structures, a focus on non-traditional health care workforce, new care management models, and a shift from fee-for-service delivery to bearing financial risk for the populations served.

What has led us to this moment in time?

- Financial incentives that promote volume, not quality outcomes
- Increased utilization
- Increased cost
- Questionable value
- Fragmented delivery of care
- Variability in treatment practices

Average Health Care Spending per Capita, 1980–2009

Adjusted for differences in cost of living

Source: OECD Health Data (June 2011)
Relationship of Cost to Quality

Key Findings: Evidence of the direction of association between health care cost and quality is inconsistent. Most studies found the association between cost and quality is small to moderate, regardless of direction (positive/negative).

Accountable Care
Accountable care is a concept that envisions a healthcare system where providers across the spectrum work together to manage the health of a population of people, rather than the uncoordinated, episodic care that is often the case today. The providers in this system are connected by common clinical protocols, aligned incentives, and supportive information infrastructure.

Glossary of Terms
• Accountable Care Organization (ACO): A clinically integrated network of providers striving to improve quality and decrease costs. The network includes attributed Medicare patients.
• Value-based contracts- Contracts with employers or payers that have the potential to return savings to providers when costs are decreased and agreed upon quality metrics are attained.

Glossary of Terms
• Bending the Cost Curve- decreasing the slope or rate of rise of health care costs for employers or health plans.
• Clinical Integration – Implementing evidence-based best practices for clinical care across the health care continuum that includes a system to monitor and encourage utilization of these practices in order to decrease unwarranted variations in care and increase the Value of care.
Core Principles of ACOs

• Provider-led organizations with strong base of primary care that are collectively accountable for quality and total per capita costs across full continuum of care for a population of patients.

• Payments linked to quality improvements that also reduce overall costs.

• Reliable and progressively more sophisticated measurement to support improvement and provide confidence that savings are increased through improvements in care.

(McClellan, McKethan, Lewis, Roski, & Fisher, 2010)

ACO Key Characteristics

• Engage physicians and other members of the health care team

• Manage, measure & report on quality and cost of health care services

• Financial incentives align with cost & quality goals

• Use Health Information Technology to understand, manage & report on network’s cost/quality performance

(McClellan, McKethan, Lewis, Roski, & Fisher, 2010)

Patient Centered Medical Home

• The American Academy of Pediatrics (AAP) defines it as:

• A Medical Home is NOT a structure or building, but rather an approach to providing comprehensive health care. The pediatric care team works in partnership with the child and family to assure that all medical and non medical needs are met.

• Right time, right care, right place

Patient Centered Medical Home

• The pediatric care team helps the patient and family access, coordinate and understand the primary, specialty, and community services

• The Medical Home model delivers primary care that is accessible, continuous, comprehensive, family centered, collaborative, compassionate and culturally sensitive to all children

Benefits of a Medical Home

• Cost effective

• Improved care

• Improved relationships and satisfaction

• Improved provider care

• Increased awareness and use of community resources

• Improved patient/family outcomes of care

• Optimal health, behavioral and cognitive development

What a Medical Home Provides

• Preventive/Primary care

• Screening

• Acute illness care

• Chronic disease management

• Coordination of subspecialty care

• Patient & family advocacy

• Coordination of community/school resources

• Transitional care
How it Works

The basic financial model underlying accountable care contracts:

- Payers attribute patients to groups of physicians and hospitals based on where the patients received the majority of their care in the prior year.
- An annual budget is established for the patients assigned to each group based on the anticipated per capita costs.
- The providers in these groups are paid under traditional fee-for-service methods during the year.
- At year’s end, the group receives a share of the savings if care is managed below the budget and/or if the network achieves certain quality targets.

A Shared Savings Example

- Hypothetic employer spends $150,000,000 per year on healthcare.
- Projected annual rise in costs of 6% = $159,000,000.
- Employer contracts with integrated network of providers, providing incentives to reduce cost and improve quality.
- Providers enact specific performance improvement efforts, e.g.,
  - Disease management programs
  - Reduced readmissions
  - Pharmacy management
- Decrease expected rise in costs to 4% = $156,000,000.
- Shared Savings of $3,000,000 to be distributed to employer and providers based on agreed upon metrics (i.e. quality).

Sample Quality Metrics for Shared Savings Contracts

- Diabetes HbA1c <= 9.0
- Diabetes LDL<100
- Hypertension BP <140/90
- Avoiding Unnecessary Antibiotic Treatment
- Breast Cancer Screening
- Colorectal Cancer Screening
- Childhood Immunizations
- Lead Screening
- Patient Satisfaction

Shared Savings Example

- Shared savings sub-total = $3,000,000
- Apply quality measures formula
- $3,000,000 can be increased, decreased, or completely eliminated based on quality scores.
In Other Words...

Accountable Care = Providers are at risk for cost and quality outcomes

Accountable Health Partners (AHP) Vision

To bring together community and faculty physicians, hospitals and other affiliated providers to
1. develop a clinically integrated care network with aligned financial incentives
2. improve population health
3. provide patient-centered care
4. promote efficient use of resources

The Growing AHP Network

<table>
<thead>
<tr>
<th></th>
<th>Adult PCPs</th>
<th>URG Pediatricians</th>
<th>Specialists</th>
<th>CNMs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>154</td>
<td>117</td>
<td>207</td>
<td>7</td>
<td>545</td>
</tr>
<tr>
<td>URMFG</td>
<td>174</td>
<td>15</td>
<td>1032</td>
<td>14</td>
<td>1235</td>
</tr>
<tr>
<td>Total</td>
<td>328</td>
<td>132</td>
<td>1299</td>
<td>21</td>
<td>1780</td>
</tr>
</tbody>
</table>

Network: Ten-County Region

Governance

- Each of the four groups has veto power over the other three
- Consensus of all participants is necessary for Board approval of decisions

Overall AHP Goal

To build a clinically integrated network across the Upstate NY region that improves the value of care* for the population we serve.

*Value = Quality/Cost
Initial Sub-goals & Strategies

- Coordinate care of PCPs and specialists
- Encourage evidence-based guidelines for health care delivery
- Reward preventive strategies at individual and system-wide level
- Examine hospital costs and utilization, including Emergency Department use
- Deliver outstanding patient care

AHP Targets for Improvement in Patient Care

- Management of high risk patients such as heart failure, diabetes, wounds
- Targeted reduction in prescription drug expense
  - Finding effective alternatives for unnecessarily expensive medications
  - Exploring refill rates to inform point of care intervention
- Care transitions/complex care management
- Streamlining the consultative process
- Behavioral health integration
- Hospice and palliative care

Care Manager Responsibilities

- Quality metrics
  - Support practices in meeting metrics
  - Identify/prioritize/implement improvement opportunities
  - Assist with Arcadia implementation & NCQA PCMH
- Chronic disease management
  - Coordinate care between specialists and PCPs
  - Access and link community resources to support care planning
- Transitional care management
  - Establish processes and/or strengthen post-hospital & post-ED follow-up

Care Management Toolkit

- Tracking registries
- Risk stratification/impactability
- Dashboards
- Payer reports (e.g. admissions/discharges)
- Care protocols
- QI Processes such as Plan-Do-Study-Act
- Reflective practice/case reviews
- Learning collaboratives
- Care management technology platform

Identifying Patients: Risk Stratification and Impactability
Pediatric Quality Measures

- Metrics chosen by state, practice, insurance
  - WCC appointments
  - Immunizations up to date
  - ADHD initial
  - ADHD maintenance
  - Adolescent preventive care
  - Adolescent counseling: depression, substance abuse, sexuality, STI
  - Pharyngitis-appropriate testing
  - URI treatment appropriate (no antibiotics)
  - BMI
  - Lead screening

Dashboard

Metric Definitions from HEDIS

- For each metric you need to define the numerator and denominator so that data can be extracted from the medical record and presented to the provider in a meaningful way.
- Ideally the dashboard should identify specific patients to contact in order to improve your performance for that metric
  - Hypertension BP Control
    - The percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose most recent BP was adequately controlled based on the following criteria:
      - Patients 18-59 years of age whose BP was <140/90

Care Protocols: Diabetes

- Standardize diabetic education and resources provided by care managers across the network
- Use evidence based practice to drive recommendations
- Use algorithm to identify high risk diabetic patients and individualize their care plan accordingly
- Lifestyle modifications focus on nutrition, weight management, and activity
- Includes common resources for patients and care managers
Laboratory Values

- A1c > 6.5%
- LDL > 150, HDL < 50, Triglycerides > 200

Is your patient...

- Referral to Community Health Worker
- Complete patient education
- Education/Self Management Support
- Microalbumin > 30
- Population Management Follow-up

Third time in four months with mild pain

Now discharged, CM has coordinated all follow-up specialist appointments, spent time

- Discharged to home but readmitted 2 days later with increased pain
- Readmitted soon thereafter with sickle cell crisis

- Given medication to manage pain, reinforced need for compliance with daily meds and
  regular follow-up with Pediatric Hematology
- Discharged without a transportation plan; mom waited over three hours in crowded
  waiting room for a ride
- Readmitted soon thereafter with sickle cell crisis
- Discharged to home but readmitted 2 days later with increased pain
- While inpatient during the last admission, CM received referral from PCP to help
  manage this family
- Now discharged, CM has coordinated all follow-up specialist appointments, spent time
  with mom discussing importance of meds and appointments, collaborates regularly
  with PCP and Peds Hematology

Care Management Exemplar #1

- Female, 13 y/o with a Chronic Cardiac Condition, Moderate Asthma, Bipolar Disorder
  - Recent hospitalization: Endocarditis
  - Opened to CM at follow-up PCP appointment
  - Referred to Pediatric Cardiology, Pediatric Pulmonary and Behavioral Health for
    follow-up appointments
  - Single mom with limited support system, fearful of going to appointments alone & has
    canceled appointments previously due to transportation issues
  - Poor medication compliance secondary to on going insurance problems
  - PCP-CM collaborated
  - CM developed a relationship with family through office and a home visits, arranged
    transportation to follow up appointments, provided resources to secure medical
    insurance, provides on going care coordination and education regarding importance
    of medication regime and keeping appointments

Care Management Exemplar #2

- Mom and 2 year old with Sickle Cell Disease presented to a rural community ED for the
  third time in four months with mild pain
  - Given medication to manage pain, reinforced need for compliance with daily meds
  - and regular follow-up with Pediatric Hematology
  - Discharged without a transportation plan; mom waited over three hours in crowded
    waiting room for a ride
  - Readmitted soon thereafter with sickle cell crisis
  - Discharged to home but readmitted 2 days later with increased pain
  - While inpatient during the last admission, CM received referral from PCP to help
    manage this family
  - Now discharged, CM has coordinated all follow-up specialist appointments, spent time
    with mom discussing importance of meds and appointments, collaborates regularly
    with PCP and Peds Hematology

Care Management Exemplar #3

- CM Protocol for transition from NICU/PICU/Floors to home
  - AHP CM contacted by inpatient D/C Coordinator-sends a weekly list
to CM of any patient being discharged to an AHP Practice. Ranks
  patients as low, medium or high risk to assist CM in prioritizing
  - CM invited to attend discharge planning meetings when appropriate
  - Within 24 hours, AHP CM
    - Assesses understanding of discharge summary & instructions
    - Assesses appointments made/kept with PCP/specialists
    - Assesses patient/family well-being
    - Assesses need for services/coordinates as needed
Year I

- Practice entry via complex care/transition management
- Staffing plans vary by size of practice/population served
- Recruitment in rural areas limited
- Variability in practice/MD readiness for CM/PCMH
- Teamwork essential to success
- Networking across AHP care managers invaluable
  - Care manager education course; shadowing; weekly clinical supervision

Year 2

- Expansion of care management support
  - Individualized practice staffing plans
  - Data coordination/quality metrics: Senior CM for QI
  - Added social work: pediatrics & adults
  - Added pharmacist
- Behavioral health integration initiatives/DSRIP
- Strengthened transitions management
- Developing care protocols to decrease care variation
- Assessing models for select specialty practices
- Mentoring/continuing education

Year 3 Care Management

Significantly strengthen behavioral health integration

Fixing Behavioral Health Care in America (2015),
The Kennedy Forum

Triple to Quadruple Aim

Practice Implications

- Reimagine role of nurses in primary care
- Raise the educational levels of nurses in primary and ambulatory care settings
  - CNL; DNP
- Nurses with public health degrees
- Working across the system for all nurses: continuum vs. siloed thinking
- Behavioral health expertise essential
- Cultivate nursing innovation

Bodenheimer et al., 2015; Gerson et al., 2014; Reiss-Brennan, 2016; Sniwatzki et al., 2015; White, Felday & Huang, 2016
Implications for Education

• Curricula that prepare nurses to practice successfully in primary/ambulatory care settings:
  – Play ACTIVE roles in interprofessional teams
  – Practice in person (human)-centered, culturally sensitive ways
  – Understand and use data to inform population health management
  – Knowledgeable about & conversant in economic and political forces shaping health care
  – Thought leaders in developing evidence-based care protocols
  – Function as organizational leaders in primary care settings
  • Lead clinical inquiry and quality improvement projects

Implications for Education

Close the innovation competence gap

• Applies to all degree programs and continuing education
  – Should not be limited to health systems management

• Use of case studies of successes and failures; project-based, field-based experiential learning; avoid didactic lecture as primary pedagogical tool

• Collaboration between experienced health care leaders ad academics to bring real world experiences to classroom
  – Opportunities for students to solve real-world problems

(Reinzier, Ramaswamy, & Schultz, 2014; White, Pillay, & Huang, 2016)
(Wite, Pillay, & Huang, 2016)

THANK YOU!

Pam Herendeen, PNP, DNP
Coordinator of Education & Staff Development
Accountable Health Partners
University of Rochester
pam_herendeen@urmc.rochester.edu