Coordinating Care in an Uncoordinated World

Rebecca Baum, MD
Objectives

1. Analyze a potential financial model for care coordination
2. Describe the role of the shared plan in facilitating effective care coordination
3. Illustrate the importance of families in developing a shared plan of care
Overall Goals for Today

1. Share unique successes and challenges pertinent to our organization
2. Identify cross cutting themes applicable to any organization
Our financial model
Partners For Kids

- Responsible for improving the quality of care and lowering costs for >320,000 children
- Partnership between NCH and >1,000 physicians caring for children
- Full financial risk through the 5 managed Medicaid plans as an “intermediary organization”
Flow of Funds

Ohio Department of Medicaid

ODM pays the Medicaid Managed Care Plans a set amount per member each month

Plan A  Plan B  Plan C  Plan D  Plan E

Plans pass capitation fee to PFK

PFK provides:
- care coordination
- population health initiatives
- network management
High Risk Case Management

As a parent, it can be hard to get your child the health care he or she needs.

The Partners for Kids Care Navigation Program is here to help!
What Are We Going to Change?

- Single point of contact for care coordination
- All care coordinators in same job description
- Implement EPIC documentation tools for care coordination referrals, assessment, and goals/interventions
2017-2022

JOURNEY TO BEST OUTCOMES
Through best people & programs

CORE STRATEGIES
Growth & Partnerships
Education

One Team Values
Operational Excellence

GOAL
Pre-eminent Clinical & Research Programs

ACCELERATORS
Quality, Safety & Service
Behavioral Health
Genomics
Wellness/Population Health

VISION
BEST OUTCOMES
for Kids Everywhere

NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.
Nationwide Children’s Hospital

Patient/Family Centered Quality Strategic Plan

Keep Us Well
Population health

Navigate My Care
Throughput Access Care Coordination

Do Not Harm Me
Preventable Harm

Heal Me Cure Me
Outcomes

Treat Me with Respect
Patient experience

Communicate With Me
What is Navigate My Care?

• Our goals
  – Reduce avoidable care
  – Improve the patient/family experience across our health care system

• Informed by
  – Organizational successes and challenges
  – Family feedback
Focus Groups

- "One department will say 'we're done with you, and another will say 'I don’t think so.'"
- "The providers aren’t talking to each other."
- "I was never told about support groups."
- "It would be nice to have a social worker call to make sure we got it right."

Communication
Transitions and Integration
Self-management and activation
Monitoring, follow up and response
Definition of Care Coordination

Care coordination is the deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient's care to facilitate the appropriate delivery of health care services. Organizing care involves the marshaling of personnel and other resources needed to carry out all required patient care activities, and is often managed by the exchange of information among participants responsible for different aspects of care.
Navigate My Care

Project Champions: Becky Baum, MD; Kimberly Conkol, RN

**Specific Aim**

By December 31, 2018, achieve the following amongst 1000 medically complex patients/month*:

- ED visits: 77 to 70
- Inpatient admissions: 62 to 56
- Bed Days: 750 to 675
- 7-day readmissions: 7 to 6 /1000 pts/mo
- 30-day readmissions: 12 to 11
- ↑ PICS composite score by 20 % from baseline of 54 to 65

**Strategic Goal**

Improve integration and coordination of care for medically complex patients

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**Key Drivers**

- **Communication**
  - Interpersonal
  - Information transfer

- **Transitions & Integrated Care**
  - Specialty ↔ specialty
  - Inpatient ↔ outpatient
  - NCH ↔ non-NCH
  - Primary ↔ specialty

- **Follow-Up, Monitoring, & Response**
  - Post-discharge follow-up
  - Troubleshooting
  - Help at home

- **Self-Management & Activation**
  - Education resources
  - Support systems

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**Projects/Interventions**

- Collaborate with related groups (Treat Me With Respect, Inter-professional Committee, Diversity and Inclusion, Comprehensive Primary Care & Health Literacy)
- Optimize Epic tools to foster communication (see PFK IT monthly project list)
- Standardize and integrate existing care navigation programs (BCMH, BH and select PFK)
- Implement CRC risk stratification
- Develop & implement activities to support transitions from IP ↔ OP, NCH ↔ Non-NCH
- Develop & implement activities to support transitions from pediatrics ↔ adult
- Develop & implement activities to support transitions from primary ↔ specialty
- Develop strategies to coordinate appointment scheduling for complex patients
- Evaluate care conference process
- Develop funding & marketing plan to continue Complex Care notebook
- Implement Daily Goals (whiteboards) for inpatients
- Expand availability of parent mentors

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*Patients in Tier 3 on the NCH pyramid
Care Coordination Competencies

- Patient Stratification
- Risk Assessment
- Care Planning
- Self Management Support
- Transition Management
- Facilitation Communication & Collaboration
- Monitoring & Follow-up
### Patient Identification & Risk Stratification (20% of Total Score)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of criteria for identifying high risk patients (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria exists and patients are identified within criteria (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Identified List of High Risk patients that are followed on an ongoing basis (1)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>List is stratified by risk (2)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Patients in different risk tiers receive different levels of support (3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Weighted Total</strong></td>
<td>12.5</td>
<td></td>
</tr>
</tbody>
</table>

### Risk Assessment (5% of Total Score)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes barriers to healthcare access - physical, cultural, language, knowledge deficits or functional abilities (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Includes educational needs (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Includes caregiver support (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Includes assessment of benefits: community resources, Government benefits, school benefits, payer benefits (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Includes home needs (durable medical equipment, home health) (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Includes readiness to change, parent preferences, primary concerns (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Includes wellness and prevention activities (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Weighted Total</strong></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

### Care Plan (20% of Total)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents Care Team (2)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Care team list includes role and responsibilities assignment (1)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Care Team list is comprehensive and extends beyond physician and medical providers; includes school, board of directors, home care and DME providers (1)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Goals are documented for each need identified in the assessment (2)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Goals interventions address barriers identified in assessment (2)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Progress on goals is tracked routinely (1)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Weighted Total</strong></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### Facilitation, Collaboration, Communication (20% of Total)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troubleshoots issues such as: benefit or payer, clinical/medication, caregiver support, etc. (3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Schedules Care Conferences (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Routinely provides update to members of the care team (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Functions as a single point of contact for which patients have direct access (3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Weighted Total</strong></td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>
Expanding Care Coordination

• 2017
  – Add FTE in 11 specialty clinics not currently providing care coordination

• 2018-19
  – Standardize activities in specialty clinics already providing condition-specific care coordination (includes Title V services)
Pain Points

Financing the program

• Leverage capitation and delegated care coordination arrangements
• Proof of concept in Medicaid population then expand to commercial payers
Cohort Payor Mix

Navigate My Care - Levels 3 & 4 by Payor Type
N = 3,240

- Commercial/Other: 38%
- PFK Medicaid Managed Care: 41%
- Medicaid Fee for Service: 18%
- Non-PFK Medicaid Managed Care: 3%
Pain Points

Transitioning from condition-specific to whole child/family perspective

• Proof of concept in PDSA clinics
• Provide additional resources when possible
Pain Points

Coordinating the care coordination

• Implement tools in EHR
• Standardize the definition of care coordination across the organization
• Identify the “quarterback”
The lessons here...

Take advantage of

• The strengths of your organization
• What’s important to your organization

Anticipate and effectively manage the impact of change

• More on this in the breakout session!
Defining the population
The Global Care Coordination Algorithm

A retrospective model where NCH charges, visits, and specialty clinic utilization are used to stratify patients into levels of care coordination.

Level 4:
- IP + ED Charges=$1M;
- IP + ED Visits=>12;
- # of OP Specialty Services= 7+

n = ~500

Level 3:
- IP + ED Charges=$500,000-$999,999.99;
- IP + ED Visits=6-12;
- # of OP Specialty Services=4-6

n = ~2,500

Level 2:
- IP + ED Charges= $250,000-$499,999.99;
- IP + ED Visits=3-5

Level 1: Everyone Else

All utilization is based on the last 12 rolling months.

NMC Cohort
Clinical Risk Grouping

BroDEST level of aggregation in CRGs, based on the presence or one or more chronic conditions in different body systems, or recent treatment of significant acute condition

<table>
<thead>
<tr>
<th>Health status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Catastrophic Conditions</td>
</tr>
<tr>
<td>8</td>
<td>Malignancy under active treatment</td>
</tr>
<tr>
<td>7</td>
<td>Dominant Chronic Disease in Three or More Organ Systems</td>
</tr>
<tr>
<td>6</td>
<td>Significant Chronic Disease in Multiple Organ Systems</td>
</tr>
<tr>
<td>5</td>
<td>Single Dominant or Moderate Chronic Disease</td>
</tr>
<tr>
<td>4</td>
<td>Minor Chronic Disease in Multiple Organ Systems</td>
</tr>
<tr>
<td>3</td>
<td>Single Minor Chronic Disease</td>
</tr>
<tr>
<td>2</td>
<td>History of Significant Acute Disease</td>
</tr>
<tr>
<td>1</td>
<td>Healthy/Non-user</td>
</tr>
</tbody>
</table>
CRG Project Steps

Phase 1
- EHR claims extract
- CRG modeling
- CRG output
- 3m Risk stratification

Testing and validation

Phase 2
- NCH/PFK Tier Promotion
- EHR interface
- Organizational spread and ongoing analysis

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Tier Promotion Criteria

- ≥ 6 ED + IP/Obs. utilization visits in the past 12 months
Risk modeling informs the resources

- Tier 4: Multidisciplinary Clinics
- Tier 3: Care coordinators
- Tier 2: Health coaches
- Tier 1: EHR

Aligns with:

- Population health
- Chronic disease mgt
- Care coordination
- Multi-specialty care
The lessons here...

We can’t provide high risk case management to everyone

- Choose a strategy to identify your population
- What’s important to your organization and to your families?
The shared plan of care
Care Coordinators assist with a journey

Assigned to care coordinator

HEALTH RISK ASSESSMENT

CARE PLAN

Monitoring, Follow-up, Coordination, etc.

Goals met
Key Stakeholders

• External
  – Parents and families
  – Payors (Medicaid managed care, Title V)
  – Schools and other agencies

• Internal
  – Hospital administration
  – Clinic staff
  – Practitioners
## Health Risk Assessment

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical health</td>
<td>Communication, cognition, activities of daily living</td>
</tr>
<tr>
<td>Medication review</td>
<td>Medication reconciliation, insurance coverage</td>
</tr>
<tr>
<td>Condition-specific</td>
<td>Asthma, diabetes, epilepsy, etc.</td>
</tr>
<tr>
<td>Nutrition</td>
<td>Formula, type of feeding, etc.</td>
</tr>
<tr>
<td>Medical devices</td>
<td>GT, trach, other equipment</td>
</tr>
<tr>
<td>Medical services</td>
<td>Home care, therapies, admissions, ED visits, preventive care</td>
</tr>
<tr>
<td>Education</td>
<td>School placement, special education services</td>
</tr>
<tr>
<td>Social</td>
<td>Financial, family make up, caregiver mental health, legal, health literacy, etc.</td>
</tr>
<tr>
<td>Community resources</td>
<td>Early intervention, Title V, behavioral health, SSI, WIC, Board of Developmental Disabilities, faith-based, etc.</td>
</tr>
</tbody>
</table>
Care Plan

• SMART goals
  • Priority level
  • Current state
• Interventions
• Contingency planning
• Self-management plan
• Communication plan
# Care Team Table

<table>
<thead>
<tr>
<th>Role/Specialty</th>
<th>Helps with</th>
<th>Provider</th>
<th>Phone</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care Coordinator</td>
<td>Care plan, follow-up, troubleshooting, Single point of contact</td>
<td></td>
<td></td>
<td>Nationwide Children’s Hospital</td>
</tr>
<tr>
<td>Primary Care Provider</td>
<td>well child checkups, sick child checkups, immunizations, referrals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Worker</td>
<td>Assist with Care Coordination</td>
<td></td>
<td></td>
<td>Nationwide Children’s Hospital</td>
</tr>
<tr>
<td>Quality Outreach Coordinator</td>
<td>Assist with Care Coordination</td>
<td></td>
<td></td>
<td>Nationwide Children’s Hospital</td>
</tr>
<tr>
<td>Developmental Behavioral Pediatrics</td>
<td>Behavioral Management</td>
<td></td>
<td></td>
<td>380 Butterfly Gardens Dr Suite 3D</td>
</tr>
</tbody>
</table>
Making it visible

Identifying Patients Enrolled in Care Navigation

- “Enrolled in Care Navigation” appears on the far right of the header for patients actively enrolled in the Care Navigation program.

- A “Care Coordinator” is listed as an active member of the patient’s Care Team.
Making it easier
## Progress to Date

<table>
<thead>
<tr>
<th>Metric</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>% Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED Visits</td>
<td>71.84</td>
<td>74.52</td>
<td>77.28</td>
<td>3.6%</td>
</tr>
<tr>
<td>IP Admissions</td>
<td>61.54</td>
<td>62.09</td>
<td>62.65</td>
<td>0.9%</td>
</tr>
<tr>
<td>Bed Days</td>
<td>668.97</td>
<td>698.30</td>
<td>729.12</td>
<td>4.2%</td>
</tr>
<tr>
<td>7 Day Readmits</td>
<td>6.10</td>
<td>6.34</td>
<td>6.59</td>
<td>3.8%</td>
</tr>
<tr>
<td>30 Day Readmits</td>
<td>10.87</td>
<td>11.38</td>
<td>11.91</td>
<td>4.5%</td>
</tr>
</tbody>
</table>
7-Day Readmissions

*all causes

7-Day Readmissions per 1,000 NMC Cohort by Month

- **7-Day Readmissions**
- **Process Stage Mean**
- **Process Stages**
- **Control Limits**
- **Goal(s)**

**Chart Type:** u-Chart

- **Desired Direction**

**7-Day Readmissions** Process Stage Mean vs. Process Stages

**Total Patients**: 4,918 - 5,566

**Improved by 3.8% - Achieved 96% of Goal**
**Alternative control limit calculations have been used to compensate for overdispersion (more variation than predicted) in the data of one or more process stages.

30-Day Readmissions
*all cause*

30-Day Readmissions per 1,000 NMC Cohort by Month

Chart Type: u-Chart (Laney adj.)**

**Alternative control limit calculations have been used to compensate for overdispersion (more variation than predicted) in the data of one or more process stages.

**

<table>
<thead>
<tr>
<th>Month</th>
<th>30-Day Readmissions</th>
<th>Process Stage Mean</th>
<th>Process Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4918</td>
<td>4928</td>
<td>4932</td>
</tr>
<tr>
<td>2016</td>
<td>4932</td>
<td>4936</td>
<td>4941</td>
</tr>
<tr>
<td>2017</td>
<td>4941</td>
<td>4945</td>
<td>4957</td>
</tr>
<tr>
<td>2018</td>
<td>4957</td>
<td>4963</td>
<td>4973</td>
</tr>
</tbody>
</table>

Total Patients

<table>
<thead>
<tr>
<th>30-Day Readmissions</th>
<th>Total Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>4918</td>
<td>4918</td>
</tr>
<tr>
<td>4932</td>
<td>4932</td>
</tr>
<tr>
<td>4941</td>
<td>4941</td>
</tr>
<tr>
<td>4957</td>
<td>4957</td>
</tr>
</tbody>
</table>

Improved by 4.5% - Achieved Goal!
The role of families
Measuring Family Experience

Boston Children’s Hospital
Pediatric Integrated Care Survey
For Parents/Guardians
Version 1.0

Pediatric Integrated Care Survey (PICS)

© 2013 Boston Children's Hospital
All Rights Reserved.
For permissions to use the Pediatric Integrated Care Survey, please contact
Dr. Richard Antonelli (Richard.Antonelli@childrens.harvard.edu)
Funded by a grant from
the Lucile Packard Foundation for Children’s Health, Palo Alto, California
Questionnaire Summary

• Measures the family’s experience with care integration
  • Current state
  • Change over time
• Consists of
  • 19 validated experience questions
  • health care status/utilization questions across five domains (access, communication, family impact, care planning, team functioning)
PICS Response Rate

5120 cohort patients

5119 (99.99%) surveyed

2895 HOR addresses

2863 valid addresses per USPS (98.9%)

327 returned surveys
11.2% response rate

2224 email addresses

2117 valid email addresses (95.2%)

398 returned surveys
17.9% response rate

2018
725 total responses
14.2% response rate
### Most Favorable Responses

<table>
<thead>
<tr>
<th>Question</th>
<th>2018 Q1</th>
<th>2018 Q4</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did all of your child’s medical providers have <em>access to the same medical records</em>? (Yes/No)</td>
<td>94%</td>
<td>96%</td>
<td>+2</td>
</tr>
<tr>
<td>How often did you <em>feel comfortable letting your child’s care team members know that you had any concerns</em> about your child’s health or care?</td>
<td>90%</td>
<td>85%</td>
<td>-5</td>
</tr>
<tr>
<td>How often did your child’s care team members <em>explain things in a way that you could understand</em>?</td>
<td>89%</td>
<td>87%</td>
<td>-2</td>
</tr>
<tr>
<td>How often have your child’s care team members <em>treated you as a full partner</em> in the care of your child?</td>
<td>78%</td>
<td>84%</td>
<td>+6</td>
</tr>
<tr>
<td>How often did you feel that your child’s care team members <em>listened carefully to what you had to say</em> about your child’s health and care?</td>
<td>72%</td>
<td>78%</td>
<td>+6</td>
</tr>
</tbody>
</table>
# Least Favorable Responses

<table>
<thead>
<tr>
<th>Question</th>
<th>2018 Q1</th>
<th>2018 Q4</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often have your child’s care team members offered you opportunities to <strong>connect with other families</strong> who they thought might be of help to you?</td>
<td>17%</td>
<td>21%</td>
<td>+4</td>
</tr>
<tr>
<td>How often have your child’s care team members talked to you about <strong>things in your life that cause you stress</strong> because of your child’s health or care needs?</td>
<td>23%</td>
<td>25%</td>
<td>+2</td>
</tr>
<tr>
<td>How often have your child’s care team members talked with you about how <strong>health care decisions for your child will affect your whole family</strong>?</td>
<td>28%</td>
<td>32%</td>
<td>+4</td>
</tr>
<tr>
<td>How often have your child’s care team members talked to you about <strong>things that make it hard for you</strong> to take care of your child’s health?</td>
<td>37%</td>
<td>37%</td>
<td>0</td>
</tr>
<tr>
<td>How often has someone on your child’s care team explained to you who was <strong>responsible for different parts</strong> of your child’s care?</td>
<td>44%</td>
<td>52%</td>
<td>+8</td>
</tr>
<tr>
<td>How often have you had <strong>to repeat information</strong> about important events in your child’s life or important details about your child’s health that you thought care team members should have known?</td>
<td>35%</td>
<td>10%</td>
<td>-25</td>
</tr>
</tbody>
</table>
Distribution of PICS Composite Scores

Q1 2018
n=165

Q4 2018
n=153

60% Favorable

69% Favorable
Emotional Intelligence

Your ability to recognize and understand emotions in yourself and others, and your ability to use this awareness to manage your behavior and relationships

Travis Bradberry
Date: Monday, May 1

Your nurse: Susan

Your doctor: Dr. Smith (Neurology)
Dr. Jones (Cardiology)
Dr. Hernandez (Hospitalist)

Your goal for today:

GET WELL!
“My only expectation is that our physician understands that living with chronic illness is riddled with stress and burden, but having (and being given) the medical tools and knowledge by a provider, to address mental health from onset, is crucial in reducing those issues. Our ultimate goal should always be to have a happy and healthy child.”

- Mother of two daughters with type 1 diabetes
The lessons here...

At the end of the day, families want to be heard and understood

• Use the shared plan of care to make that happen

• Find ways for ALL families to be heard and understood
In summary

1. We can’t provide high risk case management to everyone
2. Take advantage of the strengths of your organization and what’s important to your organization
3. Anticipate and effectively manage the impact of change
4. At the end of the day, families want to be heard and understood