Implementing Effective Integrated Care Management for Children and Youth with Special Health Care Needs

Generalizable Lessons

International Society for Social Pediatrics and Child Health

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Objectives

• Understand a framework of care integration that can be implemented at level of delivery system, communities, regions
  – Applicable for all ages
  – Relevant to all aspects of service delivery

• Be able to develop strategies to promote integrated care potentially relevant in resource-limited and resource-sufficient settings

• Discuss evidence on outcomes of integrated care
Why Important?

• Integration reduces waste associated with fragmentation in medical delivery systems
• Inter-professional integration essential to reduce disparities due to Social Determinant Risks—housing, food, poverty, violence
  – Behavioral Health
    • Substance Abuse and Dependence
    • Mental Health
    • Developmental Disabilities
Continuity and coordination of care

A practice brief to support implementation of the WHO Framework on integrated people-centred health services
Health & Social Service Spending Combined

Matching Services to Complexity—Including Social, Medical, Behavioral analysis by R. Antonelli

**Children with complex needs**
- Neurodevelopmental (Autism, etc.)
- Behavioral/Psychiatric
- Hematology/ Oncology
  - Sickle cell
  - Hemophilia
- Technology dependent
- Multiple Chronic Conditions
- Social Risk Factors
- Adverse Childhood Experiences

**Children with chronic conditions**
- Behavioral (ADHD, depression, anxiety, PTSD)
- Asthma
- Obesity
- Diabetes
- Social Risk Factors
- Adverse Childhood Experiences

**Healthy, Preventive**

**Chronic**

**Complex**

Boston Children’s Hospital
HARVARD MEDICAL SCHOOL TEACHING HOSPITAL
Miguel

- 4 year old Hispanic boy; he and mother immigrated from Guatemala
  - diagnosed—asthma by PCP at 9 months
  - referred for “poor attention”
  - ED visit 3 times in prior year for asthma
  - no assessment/intervention for attention
  - All care quality measures were met
    - Referrals made
    - Care Coordination measures require completing a loop
One Family’s Care Map

www.childrenshospital.org/care-coordination-curriculum/care-mapping
Domains of Integrated Care: the Quadruple Aim
Better Quality, Less Cost Per Capita, Improved Experience for Patients/ Families and Providers

- Person, Patient, Family, Caregiver Experience
- Care Coordination
  - High Quality Handoffs
  - Care Tracking
  - Care Planning
- Utilization and Financial Outcomes
  - Admissions, readmissions, Emergency Dept utilization
- Provider Experience
Pediatric Integrated Care Survey (PICS)

Five Core Domains
- Access to Care
- Communication with Care Team
- Family Impact
- Care Goal Creation/Planning
- Team Functioning/Quality

**Validated Assessment of Experience of Integration for Medical, Behavioral, Social, Educational, Family Support**
Family Reported Experience of Care Integration

Pediatric Integrated Care Survey (PICS)

Treated you as a full partner in your child's care?

- Always
- Almost Always
- Usually
- Sometimes
- Rarely
- Never

Shared important information about your child's health or care with care team members outside the Neurology Clinic?

- Always
- Almost Always
- Usually
- Sometimes
- Rarely
- Never

Boston Children’s Hospital Dept. of Neurology
I am referring John Doe (DOB: 10/9/1998; Atrius # 123456) to you for further evaluation.

Purpose of the upcoming patient visit: 

Requested Referral Relationship: 

Relevant clinical information includes: ***

Relevant psychosocial concerns include: ***

You may find the following relevant material available through the Atrius Portal:

If more information is needed, please feel free to call 617-972-5570 or to contact me with feedback regarding this referral.

If you’d like any further lab or imaging studies, I could arrange for them at Atrius Health and have results and images viewable to you through the Atrius Portal. I’d also be happy to discuss any referrals to other specialists that you feel would be helpful.

Patient Active Problem List:
  ADHD (attention deficit hyperactivity disorder), inattentive type [F90.0]
  Atypical nevi [D22.9]

Current Outpatient Prescriptions:
methylphenidate (METADATE CD) 40 mg capsule, ER multiphase 30-70, Take 1 capsule by mouth every morning
Results Primary Care Perspective

• Reductions in emergency department utilization, hospital admissions, and overall total medical expense
  – Sustained beyond 3 years
• Aim to keep care in highest value setting
  – Primary Care
Care Coordination Tracking and Planning

Care Coordination Measurement Tool (CCMT)

- Captures Value of CC activities—For Both QI and Business Planning
  - Supports efforts of all disciplines doing CC
  - Identify Gaps and Redundancies in Care (eg, vulnerable and underserved populations)
  - Rationalization of workforce education and deployment--functioning at “top of license or scope”
  - More accurate reflection of true cost of care—enables sustainability of move from reactive to proactive care; fee-for-service to value-based care delivery

- Adapted to capture activities/outcomes in diverse settings (adult, child)
  - Community Health Workers
  - Social Workers
  - Primary Care
  - Subspecialty Care (behavioral, surgical, medical)
  - Home Care
  - Families

Value Capture- Specialty Setting
Boston Children’s Hospital
Division of Gastroenterology CCMT

- Data represents care coordination encounters for patients with enteral tubes.
Complex Patient Admissions – Boston Children’s Hospital Rett Syndrome Clinic

Rett Patients with No Inpatient Admissions

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2013</td>
<td>124 Pts</td>
</tr>
<tr>
<td>FY2014</td>
<td>127 Pts</td>
</tr>
<tr>
<td>FY2015</td>
<td>137 Pts</td>
</tr>
</tbody>
</table>

30 Day All Cause Readmissions for Rett Patients with at Least 1 Readmission

<table>
<thead>
<tr>
<th>Year</th>
<th>Readmissions</th>
<th>Percent of Admitted Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2013</td>
<td>1 Pts</td>
<td>26.7%</td>
</tr>
<tr>
<td>FY2014</td>
<td>5 Pts</td>
<td>22.2%</td>
</tr>
<tr>
<td>FY2015</td>
<td>3 Pts</td>
<td>13.6%</td>
</tr>
</tbody>
</table>
Evidence for Integrated Behavioral Health

- Collaborative Care model (strategic use of psychiatrists to support PCP’s) significantly improves depression and anxiety outcomes, compared with standard primary care. J. Archer, P. Bower, S. Gilbody et al., "Collaborative Care for Depression and Anxiety Problems," *Cochrane Database of Systematic Reviews*, 2012, Issue 10
Current Projects Care Integration

Calgary: Children with NDD

– Families reported improved communication across care team, including school
– Decreased ED and in-patient care
– Fewer behavioral issues for children
– Improved child function at home and school

Courtesy V. Nadine Gall, MSc., Manager, NeuroDevelopmental Disorders Integrated Brain Health Initiative, Child Development Services Alberta Children's Hospital
Current Projects Care Integration

• Cincinnati
  – Pediatric Refugee Health Collaborative, an effort to unify and focus community-engaged research with refugees from Syria, has now expanded
  – Document activities used to improve access to clinical and social services

Courtesy of Riham Alwan, MD, MPH, Department of Emergency Medicine, Cincinnati Children's Hospital Medical Center
Current Projects Care Integration
Boston Children’s Hospital

– Spina Bifida Multidisciplinary Clinic
– Complex Care Service
– Cerebral Palsy Center
– Epilepsy
– Rett Syndrome Clinic
– Home Parenteral Nutrition Clinic
– Enteral Tube Clinic
– Liver Transplant Clinic
– Transition from Pediatric to Adult Care
– Discharge Optimization
– others
Projects Gearing Up

• Chile: Spanish validation of PICS for children and youth with complex care needs

• Native American, Great Plains Tribal Chairmen's Health Board/ Rosebud Sioux Tribe, US SAMHSA/ Partners in Health

• Freiberg, Germany: Improve Care Integration for Patients with Spinal Muscular Atrophy
Integrated Strategies to Achieve Health Equity

No Equity, No Triple Aim: Strategic Proposals to Advance Health Equity in a Volatile Policy Environment

Health professionals, including social workers, community health workers, public health workers, and licensed

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Integrated Care Program

Integrated Care is Important to Everyone!

Problem Statement:

Family/Patient Perspective
A national sample of parents whose children have special health care needs reported that 37% of the time, their child's care team members rarely or never explained who was responsible for different elements of their child's care. Families expect this to be 100%.

Referring Provider Perspective
More effective care could be offered in the primary care setting if consulting subspecialists would give clear and actionable information that addressed their concerns.

Subspecialist Perspective
Knowing why the primary care provider refers the patient to the subspecialty setting would allow them to know what has been done to date, and what is expected from them.
So, What Can We Do Right Now?

• Persist with Compelling, Civil, Global Advocacy
  – Bring Data!
• Build Capacity of Families and Work Force
  – Inter-professional education
• Implement Measures of Integration, CC, and Value
• Form alliances across disciplines, sectors
• Leverage Adult Priorities for Maternal and Child Health
  – Integrated Behavioral Health
  – SDoH
Children and Families FIRST!!
What’s Next?
KEEP CALM AND CARRY ON
Integrate Care
Contact

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Select References


- **MA Child Health Quality Coalition Care Coordination Framework.** Funded by the Centers for Medicare and Medicaid Services (CMS) through grant funds issued pursuant to CHIPRA section 401(d). Contact: grogers@mhqp.org  [www.masschildhealthquality.org/work/care-coordination/](http://www.masschildhealthquality.org/work/care-coordination/)


- **AHRQ Care Coordination Atlas** (McDonald Nov 2010, June 2014) and companion document Care Coordination Accountability Measures for Primary Care (McDonald Jan 2012).


- **Care Coordination Curriculum and Care Mapping Tool User Guides:** Antonelli, Browning, Hackett-Hunter, McAllister, Risko; Lind. Boston Children’s Hospital; funded thru Family Voices/MCHB HRSA grant. 2012.  [www.childrenshospital.org/care-coordination-curriculum](http://www.childrenshospital.org/care-coordination-curriculum)

- **Continuity and Coordination of Care: a practice brief to support implementation of the WHO framework on integrated people-centred health services.** Geneva:World Health Organization, 2018. Licence CC-BY-NC-SA 3.0 IGO.